

The power of
ONE

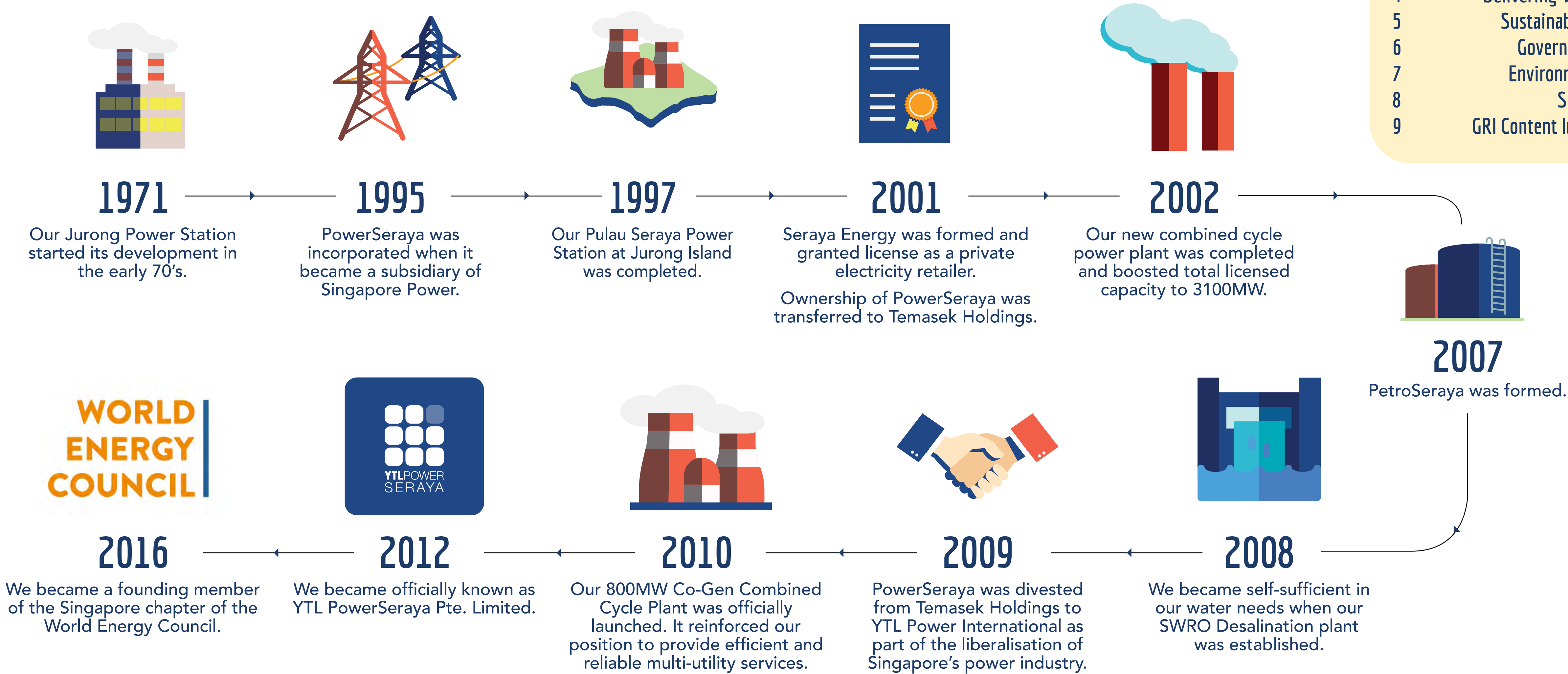


YTL PowerSeraya
Corporate Accountability Report
2016/17



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

YTL PowerSeraya has a long history of providing an essential service to Singapore...



Moving forward, we continue to build a sustainable energy future for all.

This year’s Corporate Accountability Report is an externally assured report prepared in accordance with the ‘GRI Standards: Core Option’ reporting framework. The reporting period is for the financial year starting 1 July 2016 to 30 June 2017. It covers the business operations of YTL PowerSeraya, PetroSeraya and Seraya Energy, collectively known as the ‘Company’.

While the Company produces reports on an annual basis, full reports (such as this year’s FY2016/17 report) are published biannually. In between, a condensed version of the full report known as the Corporate Accountability Bridging Report is published.

This report has endeavoured to adhere to the AA1000 Accountability Principles. Taking into account the company’s sustainability context and its direct stakeholders, it covers key items to provide readers with a good understanding of the company’s goals and operations and aims to provide an accurate and balanced account of the Company’s sustainability performance. Where possible, industry benchmarks and historical data are provided to allow a comparative analysis of the Company’s performance.

This report is compiled in consultation with internal stakeholders across the organisation to gather information and input on areas specific to their areas of business, work or function. It is reviewed by the Senior Manager (Facilities, Safety & Sustainability) and endorsed by the Senior Management Team.

For any questions on this report, please channel them to corpcomm@pseraya.com.sg.

Restatements

There have been some adjustments to figures reported in previous years’ Corporate Accountability Reports and they are listed below. These adjustments are minor and have no significant impact on the organisation or key stakeholders.

- **Energy Consumption within the Organisation (GRI 302-1, previously G4-EN3)**
- Natural Gas (in GJ) for FY2014/15 and FY2015/16 should be ‘66,641,257’ and ‘69,579,634’ respectively
- Heavy Fuel Oil & Diesel (in GJ) for FY2014/15 and FY2015/16 should be ‘254,597’ and ‘255,060’ respectively.
- **Energy Intensity (GRI 302-3, previously G4-EN5)**
For FY2015/16, it should be ‘26.4’.

Independent assurance statement

YTL PowerSeraya appointed Ramboll Environ to provide assurance on this report. The external assurance statement can be found here:
https://ytlpowerseraya.com.sg/wp-content/uploads/2018/01/YTLPS_FINAL_ASSURANCE_STATEMENT-signed-1.pdf

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index



1

About This Report

2

Identity

3

Messages From The Top

4

Delivering Value

5

Sustainability

6

Governance

7

Environment

8

Social

YTL PowerSeraya embodies the Power of ONE. As a premier energy partner in Singapore, our long-term sustainable operations have led to a strong network and an understanding of the local market. Our organisation has evolved through decades of experience - governed by high industry standards, with regard for the environment, society and our stakeholders - into an integrated energy business to cater to your utility needs.

Who we are

YTL PowerSeraya Pte. Limited (YTL PowerSeraya) is a wholly-owned company of YTL Power International Berhad, which is listed on the Bursa Malaysia Berhad (previously known as Kuala Lumpur Stock Exchange). YTL PowerSeraya owns and manages power generation and desalination plant assets in Singapore.

YTL PowerSeraya’s vision

To be the leading provider of integrated utilities and energy solutions for a sustainable future.

Primary revenue stream

Electricity and high pressure steam

Business activities:

Fuel oil is purchased directly from the market and natural gas directly from Singapore intermediaries via long-term contracts, which come in the form of Liquefied Natural Gas (LNG) and Piped Natural Gas (PNG). These together with desalinated water, form the inputs to produce high pressure steam, which is sold to industrial customers on Jurong Island, Singapore, whereas electricity generated by the power plants is sold to the Energy Market Company.

YTL PowerSeraya is supported by its two wholly-owned subsidiaries:

Seraya Energy

Seraya Energy is the electricity retail arm of YTL PowerSeraya.

Primary revenue stream: sale of electricity and gas to commercial and industrial customers

PetroSeraya

PetroSeraya is the physical oil trading and oil storage tank leasing arm of YTL PowerSeraya. It owns and manages the oil terminal and oil tank farm assets on Jurong Island, Singapore. In addition, it sources and secures fuel supplies for the power generation business of YTL PowerSeraya.

Primary revenue stream: oil trading, oil storage tank leasing and blending activities.

Externally-developed charters and other subscribed or endorsed initiatives

Signatory to the 5 Principles of Fair Employment Practices subscribed by the Tripartite Alliance of Fair & Progressive Employment Practices, Singapore

Signatory to the 10 Principles of the United Nations Global Compact

Founding member of World Energy Council, Singapore Chapter

Memberships

Gold Member

Global Compact Network Singapore

Member

Sustainable Energy Association of Singapore



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Corporate overview

YTL PowerSeraya Pte. Limited					
Primary Services	 Electricity Generation	 Utilities Supply (Steam, Water)	 Electricity & Gas Retailing	 Oil Storage Tank Leasing	 Oil Trading and Bunkering
Corporate office 1 HarbourFront Place #17-01 HarbourFront Tower One Singapore 098633	Ownership YTL PowerSeraya Pte. Limited is a wholly owned subsidiary of YTL Power International Berhad.		Markets & sectors served Singapore Electricity		Countries of operation Singapore
Employees (as of 30 June 2017 unless otherwise indicated)	319 Average monthly headcount over 12 months FY2016/17	99.7% Full-time employees	75.2% Male employees	45.1% Covered by collective bargaining	
Staff Distribution by Age	<30 years 12% 30 - 50 years 44% > 50 years 44%				

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index



About This Report
Identity

1
2

3 Messages From The Top

Delivering Value
Sustainability
Governance
Environment
Social

4
5
6
7
8

Chairman’s Message



TAN SRI DATO’ (DR) FRANCIS
YEOH SOCK PING
Chairman

Numbers

For the year in review, we achieved a revenue of \$1.8 billion, a slight dip from \$1.9 billion in the previous year. This was offset by lower operating and interest expenses, which resulted in higher Net Profit After Tax of \$41.0 million, compared to \$25.3 million in FY2015/16.

Excess generation supply and lower electricity units sold, coupled with intense competition in the electricity retail business, continued to exert downward pressure on revenues and profit margins. Despite challenging conditions that persist, YTL PowerSeraya’s diversified energy strategy has kept us resilient.

Delivering sustainable value

In the face of rapid changes within the retail electricity environment, YTL PowerSeraya’s established track record and capabilities in meeting consumers’ electricity needs will continue to stand us in good stead.

The liberalisation of the retail electricity market which is expected to take place in the second half of next year will offer opportunities to tap on new customer segments and grow our revenue base. The changing landscape, characterised by digital revolution and new technologies, will at the same time alter the rules of consumer behaviour in procuring and consuming electricity.

Consequently, we will seize this opportunity to drive our growth. To facilitate the development of a highly competitive market with varied needs, we are looking into developing the right capabilities and tools to support a high level of customer service. Renewable energy – in particular solar – will also be explored as an energy solution and offering to customers.

As you will see in the report, climate change and its impact on the environment (and subsequently impact on consumers) continue to feature as a key part of our growth agenda.

Appreciation

I would like to thank the Directors, the Senior Management team and staff of YTL PowerSeraya for staying united as one to bring light to the nation and people. In the midst of an industry outlook which continues to be challenging, they have not only attuned themselves to uncertainty but also capitalised on the situation to do things differently so we may continue to grow our business and presence.

My appreciation also goes out to all our customers, who continue to trust us in delivering the exceptional service that they have come to expect from us. We are passionate about ‘Building the Right Thing’ – embedded in our culture across the YTL Group – and this philosophy will continue to guide us as we work towards building a sustainable energy future for all.

I would also like to thank our business partners, and the Union of Power and Gas Employees (UPAGE) for their valuable partnership with the Board and Management.

Thank you and God bless all of you.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

CEO’s Message



CHAN SWEE HUAT
Chief Executive Officer

Our group’s corporate score sheet

The last financial year continued to present challenging operating conditions marked by increased competition in the electricity retail business and excess capacity in the power sector. Still, YTL PowerSeraya persevered and lifted profitability margins higher than the previous year, supported in part by keeping a focus on operating efficiencies and sharpening our long-term business model.

Our retail arm, Seraya Energy, managed to retain its industry position as one of the top three electricity retailers in Singapore – a testament of how our in-depth experience and knowledge is vital in understanding and servicing the electricity needs of the market, and qualities which I believe will remain vital for mass consumers when open electricity market comes round in 2018.

The Group’s non-regulated business (including oil tank leasing, oil bunkering and high purity steam) continue to support our revenue and profitability margins.

Sustainability and social agenda

Over the years, our company has contributed to the country’s climate change action by reducing substantially our greenhouse gas (GHG) emissions intensity by an estimated 33.4% from 2005 levels.

We achieved this by investing in more energy-efficient power generating assets and switching to less carbon-intensive fuels. While we foresee limited power plant efficiency gains in the near future as these efficiency levels have currently reached its peak, we will continue to seek ways to improve the plants’ performance where possible.

For the year in review, direct GHG emissions intensity of 0.389 tCO2e* per MWh remains the same level as the previous year. This compares well with our three-year target under our climate action plan to keep emissions below 0.40 tCO2e per MWh – a goal that demands our power plants operate as efficiently as possible and at high reliability and availability levels.

As a company that emphasises environmental sustainability in its operations, YTL PowerSeraya is at the same time mindful of the Singapore government’s intent of introducing a carbon tax, which seeks to send a price signal to encourage consumers of the entire energy chain to curb emissions. For sustainable outcomes, the additional costs arising from the carbon tax implementation will have to be addressed with relevant stakeholders, while taking into consideration the challenging market conditions facing the power industry in the short- to long-term.

Importantly, we continue to focus on working towards energy conservation and educating our stakeholders on its importance.

For example, YTL PowerSeraya’s key sustainability programme REAP continues to help participants achieve at least 10% energy savings in their households. At the same time, our water education programme PLAY hosted more than 200 students in the last financial year.

On the social front, our training programmes continue to equip our employees with the skills and competencies to enable the company to stay competitive. We also continue to work closely with our adopted charity GROW – be it through fund-raising initiatives or fun-filled organised activities – to help make a difference in the lives of its cerebral palsy clients while giving our employees opportunities to be engaged in meaningful activities.

Thanks

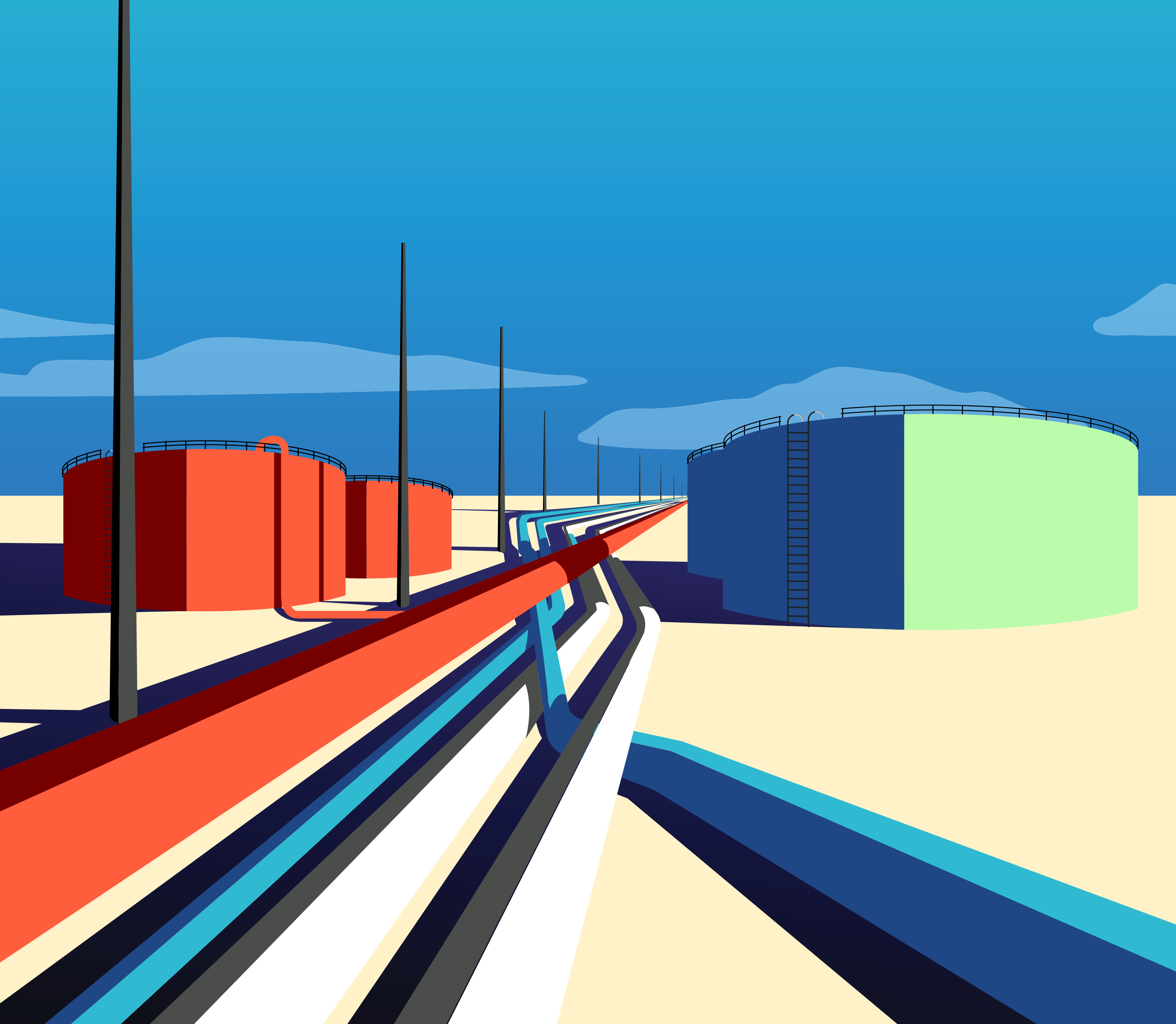
I would like to express my appreciation to our staff for their commitment and loyalty, despite facing a multitude of challenges in the competitive landscape. What sets us apart is an industrious team that strives to overcome any obstacle. Sincere thanks too to our Board of Directors and Senior Management team for their unwavering support.

I am also deeply appreciative of the enduring bonds forged with our customers, the Union of Power and Gas Employees (UPAGE) as well as business partners.

Energy is a way of life and we continue to be driven by the impact our work can have on the lives of people around us. With our strong foothold as an essential service provider, I am certain we have what it takes to remain flexible and grow stronger as a Group to continue delivering long-term value.

*carbon dioxide equivalents expressed in tonnes

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index



1
2
3

About This Report
Identity
Messages From The Top

4 Delivering Value

5
6
7
8

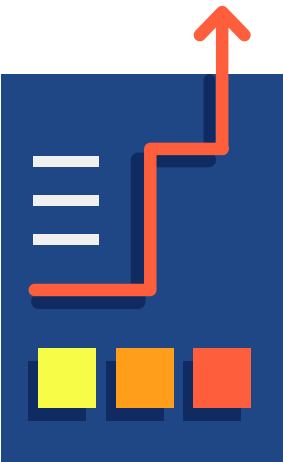
Sustainability
Governance
Environment
Social

The power of ONE creates many opportunities for us to offer value-added services to our partners and shareholders. With our experienced and diverse expertise, we are able to deliver energy solutions that create strategic growth for the company and our partners.

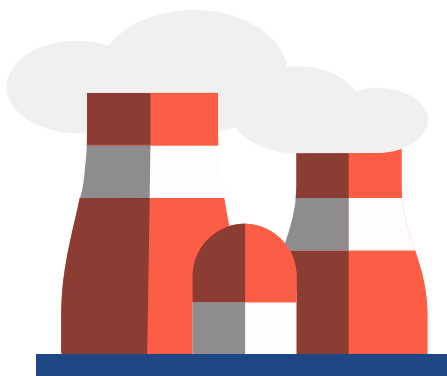
Delivering Value

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Against the backdrop of a challenging energy landscape:



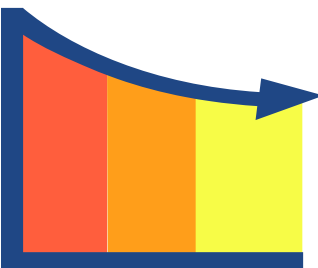
FY2016/17 NPAT Increased to **\$41.0mil** (vs. \$25.3 mil in FY2015/16*)



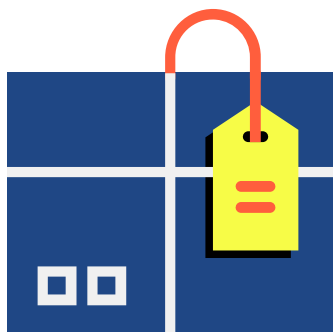
Reduced our Direct GHG Emissions Intensity from 2005 levels as of FY2016/17 by **33.4%** thereby contributing to Singapore's 36% emissions intensity reduction target.



Became a **founding member** of the S'pore Chapter of World Energy Council (since Nov 2016)



FY2016/17 revenue saw slight dip of **4.7%**



Contributed to the local economy by locally procuring **\$73.9mil**** of goods and services



Invested **\$0.41mil** to safeguard safety & health, and the environment

Wastewater treatment	57.8%
Safety & Health	25.2%
Maintenance of Oil Tanks & Flue Gas Desulphuriser	17%



Placed among **TOP 3** electricity retailers



Earned the **Asia Sustainability Reporting (Best Workplace) Highly Commendable Award**



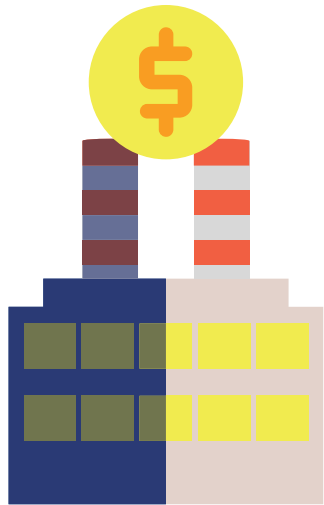
FY2016/17 Community Investments

Organised **6 initiatives** for the community

Clocked **220 Hrs** of Volunteering

* Extracted from the Company's (YTL PowerSeraya, Seraya Energy and PetroSeraya) audited financial statements
** This figure, based on purchase orders issued, excludes natural gas and heavy fuel oil purchases which are commercially sensitive information.

Delivering Value



Invested in gas-fired plants & desalination plant:
> \$2billion
since 2000

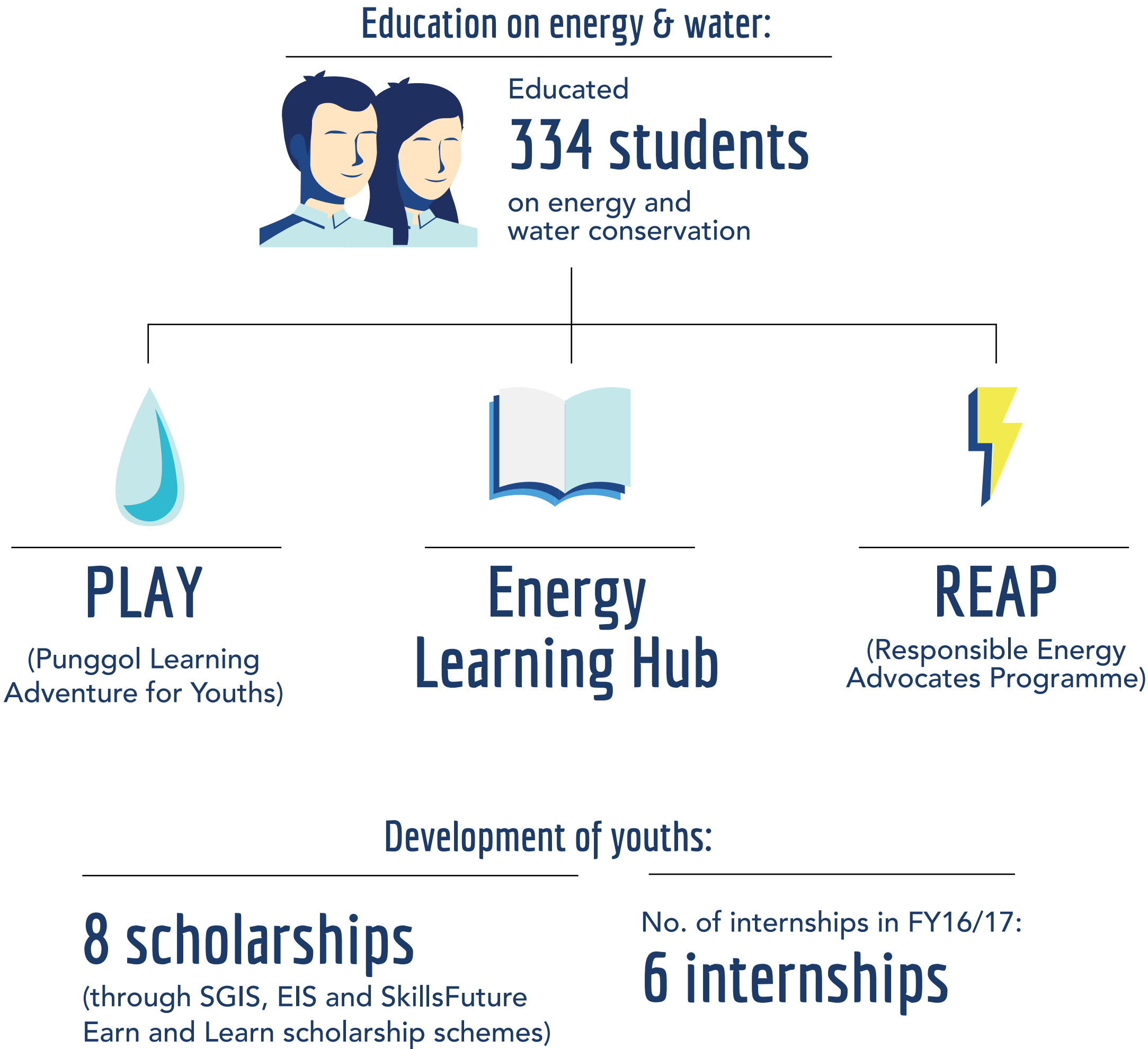


Supplied
17.7%
of Singapore's electricity demand in FY2016/17



Provides the energy needs of
3 companies
with high purity steam & contributes to the Jurong Island petrochemical ecosystem

We are the 2nd largest power generator by licensed capacity



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Milestones



OCTOBER 2016
Seraya Energy Takes Part in Project Optiwatt

Seraya Energy, the Group’s retail arm, signed a Memorandum of Understanding with the Energy Market Authority for an industry pilot programme known as Project OptiWatt. This project aims to help consumers optimise energy consumption by managing their demand.



OCTOBER 2016
Eco-Office Re-certification

YTL PowerSeraya was once again certified as an eco-office by the Singapore Environment Council. Since 2008, the company has consistently practised green habits in the workplace to meet the eco-office auditing standards.



NOVEMBER 2016
‘Highly Commended’ for Best Workplace Reporting

The company received a special ‘Highly Commended’ award at the Asia Sustainability Reporting Awards 2016 for Asia’s Best Workplace Reporting. The award recognises the company for its leadership in workplace matters to develop an engaged, motivated and productive workforce.



NOVEMBER 2016
YTL PowerSeraya joins the World Energy Council Singapore Chapter

As one of the founding members of the Singapore Chapter of the World Energy Council, YTL PowerSeraya will help play a role to chart the course of Singapore’s energy landscape.



JANUARY 2017
Collective Agreement Signing with UPAGE

YTL PowerSeraya signed a new Collective Agreement for 2016 to 2019 with the Union of Power and Gas Employees (UPAGE) – introducing key refinements to keep its terms of employment competitive.



FEBRUARY 2017
Seraya Energy Celebrates a Golden Decade

To coincide with the 10th year anniversary of Seraya Energy’s Forex and Oil Symposium, which is popular among customers for its insightful market updates, the retail arm also celebrated its 10-year partnership with some of its customers at the event – a testament of the strong foundation of customer trust and commitment built over the years.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Performance Overview

Seraya Energy

YTL PowerSeraya’s retail arm, Seraya Energy held a market share of 17.8% in the contestable retail electricity sector in FY2016/17, a modest decrease from 19.2% in FY2015/16. Correspondingly, sales volume was 5,924GWh for the year ended 30 June 2017. Even as intense competition persists, Seraya Energy managed to maintain a top-three position among private electricity retailers.

The retail team also gained a steady foothold with small businesses as more industrial and commercial consumers became eligible for contestability. Since March 2013, the Energy Market Authority has progressively lowered the electricity consumption threshold for contestability from 10MWh to 2MWh per entity, thereby giving small businesses a choice in choosing their preferred electricity provider.

Seraya Energy grew in tandem with this industry move and successfully secured a pie of this market segment by offering various financial customised electricity packages to meet different needs and mapping out their switch-out and on-board journey for a smooth transition. On an on-going basis, the team also seeks to ensure that every touch point is seamless and intuitive to provide the best customer experience.

These gradual measures, coupled with Seraya Energy’s extensive experience, will stand the team in good stead as they ready themselves for the advent of open electricity market, which will give mass consumers the choice in being able to choose their preferred electricity provider. Various initiatives will drive new service solutions and approaches, including forming new channel partnerships to reach more user segments and adopting a digital approach to better serve customers.



Trading and Fuel Management (PetroSeraya)

The Trading and Fuel Management arm (PetroSeraya) continues to lease out all of its 18 storage tanks, which has a combined storage capacity of 810,000m³.

In the last financial year, PetroSeraya handled 12.97 million metric tonnes of fuel oil and diesel. This was 5.2% lower than FY2015/16 due to prolonged challenging market conditions. At the same time, 1,209 vessels berthed at the terminal in FY2016/17, compared to 1,161 vessels the year before, with an average berth utilisation rate of more than 57%.

Despite prevailing uncertainties in the oil market, PetroSeraya will continue to focus on tank leasing and fuel management activities to boost its presence in this area, as well as explore opportunities to further optimise and strengthen its jetty and oil terminal performance.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Performance Overview

Utilities and Energy Markets

For the financial year in review, YTL PowerSeraya sold 8,620GWh of electricity. Generation market share saw a slight dip to 17.7% as compared to the last financial year of 18.7%. This was attributed mainly to an over-supply in generation capacity in the wholesale electricity market, which continued to outstrip market demand.

At the same time, the company gained momentum in its three-year potable water sales agreement (which had commenced in June 2016) to supply up to 1,000 m³ of potable water daily – an increase of 30% as compared to the previous financial year.

Within the last financial year, YTL PowerSeraya also proved its resilience and quality management capabilities following a joint review exercise with the regulator, Energy Market Authority (EMA), in early 2017 to assess the resilience of its gas and electricity systems. The audit process covered various areas including Standing Operating Procedures (SOPs) for operations and maintenance, maintenance practices, technical manpower training, as well as emergency preparedness and response to gas and electricity emergencies.

Process & Innovation (P&I)

The Process & Innovation (P&I) team continued to review its existing infrastructure and systems to support various business activities, with emphasis placed on growing and keeping pace with updated technology developments within the energy industry.

With an increasingly mobile applications- and technology-dependant environment, the facets of cybersecurity have evolved. To help protect critical data and customer privacy, the P&I team worked closely with internal and external stakeholders, including regulatory agencies, to develop more efficient and robust cybersecurity initiatives.

As part of the Group’s aim to drive a technology-enabled user experience, the team is working towards implementing a new Customer Information System which will help boost the efficiency and competitiveness of the retail business. When completed, the flexibility of the system will also help support the needs of mass consumers and build their experience and confidence in the brand when the Group enters a fully contestable market in 2018.

Moving forward, P&I will continue to push the boundaries of information technology services and efficiencies, discover new challenges and maintain sector-leading service standards which will benefit various business groups within the company, as well as its customers.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Performance Overview



Human Capital

Creating an inclusive workplace where every employee is valued and respected remains a key priority for the company, as this brings out the best in employees and ultimately contributes to the company’s bottom-line.

At the same time, an Annual Training Needs Analysis and Planning process is carried out every year to identify, plan and execute a total company training plan that seeks to close the competencies and performance gaps of employees, in support of business needs. A total of 700 training places, averaging 2 training places per employee are planned for employee training and development each year.

Since 2016, the Company has sought to foster a shared ownership of the learning environment by organising more in-house training using internal subject matter experts. These efforts will continue in the current and future years to enable more effective transfer of knowledge across different groups and functions and at the same time, build up staff’s knowledge base to enhance overall organisational capability.

YTL PowerSeraya continues to offer scholarships in local polytechnics and universities to attract talents to be groomed for engineering specialists and leadership pipelines. Sponsored scholars have opportunities to acquire knowledge of the power industry through internship placements and upon graduation, embark on their careers with the company. To-date, a total of 8 scholarships have been awarded under various industry-partnered scholarship schemes / programmes.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index



- 1
- 2
- 3
- 4

About This Report
Identity
Messages From The Top
Delivering Value

5 Sustainability

- 6
- 7
- 8

Governance
Environment
Social

The ability to grow continuously as ONE is defined by our goal to become a leading sustainable provider in the industry, underpinned by a holistic approach towards improving our economic, environmental and social performance.

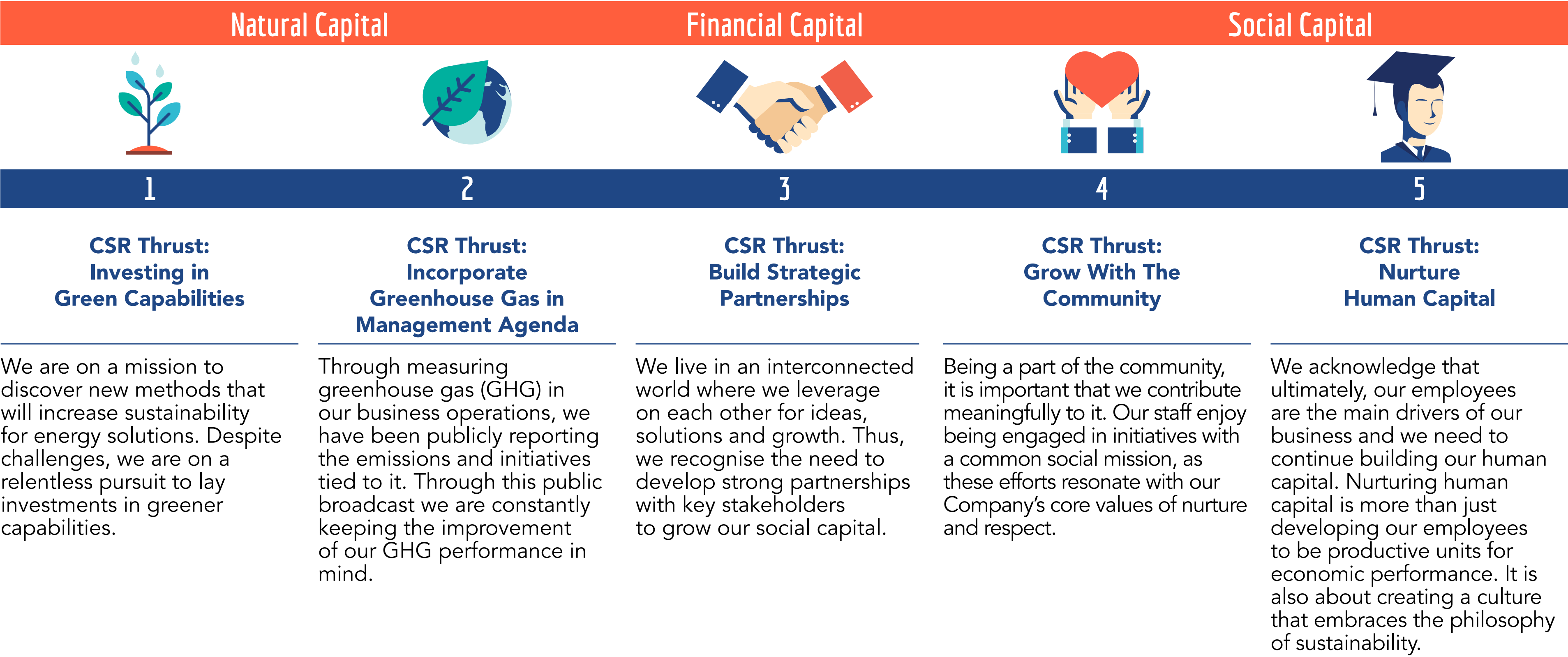
1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Our CSR Vision

To promote a positive and sustainable environment as well as to improve our social contribution to the community in which we operate.

Growing the 3 Capitals of Sustainability with our 5 CSR Strategic Thrusts

To realise our CSR Vision, we seek to improve our economic, environmental and social performance through our five CSR Strategic Thrusts.



Contextualising Sustainability

Internal and external factors which impact the company’s main revenue-generating businesses and the five CSR Thrusts are material to the company’s sustainability. Being able to seize opportunities despite the presence of risk conditions is important in order to innovate, grow and meet future challenges.

Besides energy and water which are key to the business, developing human capital and forging partnerships are also important. For example, the company’s collaboration with its adopted charity not only helps to shape a more inclusive society, but also seeks to provide opportunities for staff to be part of the giving process.

As a company that strives to be a leading provider of integrated utilities and energy solutions, the efficient use of fuel and water supply are material to the company’s long-term sustainability. This is especially so in Singapore, where there is a lack of natural resources. The momentum picked up with the Paris Climate Change Treaty and the impending Singapore carbon tax policy places further importance on engaging key stakeholders to fight climate change and influence policy outcomes that will balance the economy, power sector and the country’s target to reduce emissions.

As power is a critical infrastructure, cyber security has, in recent times, emerged as an important aspect of the company’s business. Singapore’s vision to build a digital economy for the future is expected to transform customers’ consumption of goods and services and thus affect how electricity will be marketed and sold in future. The company’s Human Resources team will need to leverage on technology to innovate and grow in order remain competitive. Working with unions to ensure that the workforce stays current and relevant will become increasingly important. The company’s aging employee profile brings challenges of renewal which is currently addressed by ensuring knowledge-transfer from experienced to younger staff. To drive high staff retention rates and greater motivation in the company, providing a safe workplace and equal opportunities for staff to develop and grow within the organisation is also key.

The company’s material issues are reviewed by the Senior Manager (Sustainability, Safety & Facilities) on a yearly basis to ensure its relevance in a fast-changing landscape. This is done in consultation with the senior management team. While the material topics and the corresponding stakeholders have remained relatively unchanged since a decade ago, its impact and underlying issues saw some changes.

In the latest materiality review, climate change and a competent workforce emerged as the key material topics, corresponding with the impending Singapore carbon tax and the company’s need for succession planning due to its aging workforce. On the former, a Carbon Taskforce (CT) was set up in March 2017 to address the implementation of carbon tax in 2019. Since then, the CT has been engaging various government agencies, in particular MEWR, NEA, NCCS and EMA*, to voice concerns on its impact on the power sector, so resulting carbon risks may be assessed. Concerns raised include the challenges of reducing GHG emissions from current levels, as well as seeking clarity on the carbon pricing structure and mechanism.

The company also discussed possible energy efficiency enhancements with its existing power plant assets with OEMs despite known limitations of doing so. More on the company’s risks and opportunities arising from the climate change topic are shared in this report.

With an ageing workforce, building a competent workforce remains key. The company continues to focus on maintaining a skilled, engaged and healthy workforce by placing continual emphasis on training and development, as well as initiatives that promote a balanced and active lifestyle. The company’s efforts to build a pipeline of new blood saw two new employees after they underwent scholarship and internship programmes. Engagements with the union on a periodic basis also help to ensure that issues pertaining to worker productivity, fair employment and employee well-being are given its due attention. Refer to page 49 on the company’s partnership with the union.

As a responsible corporate citizen, the company also strives to align its materiality with the 7 SDGs (Sustainable Development Goals). The most material issues of the Company, its key stakeholders and its alignment with the Company’s CSR Strategic Thrusts and the SGD are captured in Table A below.



* MEWR, NEA, NCCS and EMA respectively refers to Ministry of the Environment and Water Resources, National Environment Agency, National Climate Change Secretariat and Energy Market Authority.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

What is most material to the Company (Table A)

Material Topic	Main Stakeholders	Impacts That Occur Within the Organisation	Impacts That Occur As A Result Of The Organisations' Relationship With Other Entities:	Alignment With CSR Strategic Thrusts	United Nation's Sustainable Development Goals (SDG)
Climate Change	Customers	• The use of more energy-efficient power generation units lead to less carbon-intensive fuels used for power generation. • This results in lower GHG emissions to mitigate climate change effects. • GHG emissions have a direct impact on the company and an indirect impact on customers.	• As a signatory to the UN Global Compact Principles, we have a responsibility to manage our GHG emissions. • Environmentally-conscious customers would prefer electricity retailers that are more energy-efficient.	'Invest in Green Capabilities' (a need to build up capabilities to monitor our energy performance)	SDG 12 – Responsible Consumption and Production
	Government	• We play a part in shaping energy policies (including managing GHG emissions) for a sustainable future with regulators.	• Government policies can influence our decisions on future carbon abatement investments to lower GHG emissions.	'Build Strategic Partnerships' (seeks to proactively engage government on sustainable energy policies)	SDG 17 – Partnerships for the Goals SDG 13 – Climate Action SDG 9 – Industry, Innovation & Infrastructure
	Suppliers	• Effective supplier management practices help ensure that maintenance and repair activities are performed by qualified and experienced suppliers to enable the power plant to operate in an efficient and reliable fashion. We collaborate with key OEMs (Original Equipment Manufacturers) for energy efficiency enhancements to minimise GHG emissions.	• A sustainable relationship with our key OEMs for the maintenance support of our core power plant systems is important to ensure that our plant operates efficiently to lower our GHG emissions.	'Invest in Green Capabilities'	SDG 17 – Partnerships for the Goals

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

What is most material to the Company (Table A)

Material Topic	Main Stakeholders	Impacts That Occur Within the Organisation	Impacts That Occur As A Result Of The Organisation's Relationship With Other Entities:	Alignment With CSR Strategic Thrusts	United Nation's Sustainable Development Goals (SDG)
Fuel Supply	Gas Suppliers	- Natural gas is the primary fuel source for power and steam generation. - The availability of natural gas and the proper maintenance of facilities & pipelines for the smooth delivery of gas for power and steam generation is crucial for business continuity.	We establish strong relationships with gas suppliers to ensure reliable sources of gas supply at competitive prices.	'Build Strategic Partnerships'	SDG 17 – Partnerships for the Goals
Water Supply	Customers	We ensure the high availability of our seawater desalination plant to minimise the use of freshwater resources and as an important feedstock to supply high purity steam to our customers.		'Invest in Green Capabilities'	SDG 12 – Responsible Consumption and Production
Competent Workforce	Employees	How well we perform depends on the competencies of our people. Continual investment in the training and development of employees is important for the company to innovate, grow and stay competitive.	- We depend on reliable and competent contractors to maintain our plant equipment for the smooth running of plant operations. - We provide scholarship programmes and internships to attract young talents while giving our employees avenues to nurture and grow.	'Nurture Human Capital'	

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

What is most material to the Company (Table A)

Material Topic	Main Stakeholders	Impacts That Occur Within the Organisation	Impacts That Occur As A Result Of The Organisation's Relationship With Other Entities:	Alignment With CSR Strategic Thrusts	United Nation's Sustainable Development Goals (SDG)
Health & Safety	Employees	We recognise the importance of keeping the workplace a safe environment for our employees to work in. Keeping our employees healthy benefits their well-being, their families and, in turn, the company.	We work with the union to enhance the safety and health of employees.	'Nurture Human Capital'	SDG 3 – Good Health & Well Being
Equal Opportunity, Inclusiveness	Employees	- As a signatory to Tripartite Alliance of Fair Employment Practices, we provide equal opportunities for employees to develop and contribute to the company's growth regardless of age, religion and ethnicity. - We recognise our role in creating conditions that allow people to have quality jobs which promote the economy.	Our approach towards inclusiveness extends beyond our people to include our adopted charity GROW. Through this association, the company makes meaningful contributions to the society and provides opportunities for meaningful staff engagement. The company is what it is because of its association with others and the society it comes from.	'Nurture Human Capital' 'Grow With the Community'	SDG 8 – Decent Work & Economic Growth SDG 10 – Reduced Inequalities

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index



Carbon Risks & Opportunities

The Company has been part of the on-going consultation process since the government’s announcement to impose a carbon tax on upstream emitters in 2019. The Company expects the resulting annual tax obligation to reach between S\$40 to S\$80 million from 2020 onwards. However, it foresees it will not be able to absorb this annual carbon tax due to the following:

- i) Profit margins due to current unsustainable electricity prices are projected to continue in the medium-term. This limits the financial capacity of power generators to absorb the carbon tax in the short-term and will delay investments in higher efficiency power generating assets in the medium- to long-term.
- ii) There are natural limits to efficiency improvements from existing power generating units. Major retrofitting of existing generation units in the short-term is not only operationally challenging, it also entails huge capital outlays whose returns will not justify the investment.

Notwithstanding the limitations, the Company is exploring with OEMs to explore further energy efficiency improvements that may be made to existing power generating units.

- iii) Scarce land in Singapore and its renewable energy-disadvantaged situation provides limited scope for power generators to invest in utility scale solar PV plants.

However, the Company will continue to explore opportunities in deploying solar solutions at the power plant and with its customers.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Risk & Opportunities of Unsustainable Electricity Prices

- Unsustainable electricity prices may delay investments in traditional thermal power plants.
- This affects the energy security of the country, where the power sector may not be able to meet energy demand in the long-term.
- However, this presents opportunities for power generators to discuss with regulators on ways to moderate electricity prices to more sustainable levels in the medium- to long-term.

Risks & Opportunities from Electricity Retail Market

- Entry of new electricity retailers persists with on-going risks of market share erosion and narrow profit margins.
- Seraya Energy sees this as an opportunity to serve more customers with competitive electricity packages and gain greater market share at the same time.
- Seraya Energy is staying ahead by looking at new ways to engage customers and deliver customer satisfaction.

Cyber Security

- As Singapore’s Power Utilities sector is identified as one of the nation’s Critical Information Infrastructure (CII) sectors, it is critical that the sector maintains a strong cyber risk mitigation framework.
- YTL PowerSeraya has been working with the CSA (Cyber Security Agency) of Singapore to strengthen its cyber resilience by adopting the ISO 27001 management system for information security. It also participated in industry-wide exercises to test operational processes and possible scenarios, and learn from best industry practices.

Handling Emergencies

- YTL PowerSeraya has an established response framework for handling emergencies, in order to safeguard the wellbeing of employees, contractors, customers, the public and the environment. Plans are reviewed periodically to ensure alignment with updates and changes in business operations and industry regulations.
- YTL PowerSeraya will be setting up a working committee to develop a Safety Case regime. The aim is to assess its current ability of preventing major accidents and mitigating risks should a major accident occur as part of the regulatory requirement under the Workplace Safety & Health (Major Installations) Regulations. Over time, the Company seeks to boost the organisation’s capability of addressing major accidents, thereby strengthening its emergency response preparedness.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Supply Chain Risks

Energy and water security are important for business continuity. A reliable fuel and water supply is thus material to the company’s long-term sustainability

Fuel Supply

- A stable and readily available supply of fuel (in the form of heavy oil and natural gas) is vital to the company’s operations.
- To ensure a buffer against fuel supply shocks, YTL PowerSeraya maintains a 60-day fuel oil stockpile in line with industry regulatory requirements.
- Dual sources of natural gas, which includes Piped Natural Gas and Liquefied Natural Gas, as feedstock to the combined cycle power plant units are also available.
- This diversification of fuel sources is important to ensure a sustainable and secure fuel supply.
- Currently, 95% of the country’s electricity is generated from natural gas, due to the renewable-disadvantaged situation in Singapore.
- The energy security of gas is important and met by the government’s move to appoint more gas importers. Correspondingly, a Spot Import Control Policy was developed to allow additional gas imports from more supply sources.
- This enables LNG buyers like YTLPS to complement their long-term gas supply with spot LNG imports.
- A Secondary Gas Trading Market has also been set up to enable gas users like YTLPS to optimise its gas supply portfolio.
- A revised Gas Supply Code also serves to strengthen the resilience and safe operations of Singapore’s gas supply system.

Water Supply

- To meet internal plant processing needs and fulfil customers’ demands for high pressure steam and potable water, the Company diversifies its sources of water supply.
- More than 95% of power plant needs is met by renewable water resources which comprises recycled water (NEWater) and desalinated water from its in-house desalination plant.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Supply Chain Risks

Production Risks

- Optimising the operational capabilities of power plant units is critical to producing electricity, high pressure steam and potable water to customers.
- The Company carries out a combination of scheduled and condition-based maintenance regimes to mitigate production risks and ensure safe and efficient operations.
- It also conducts regular training for its workforce and adopts ISO 9001, 14001 and OHSAS 18001 to ensure that power plants run reliably, efficiently and safely while protecting the environment at the same time.



Human Capital Challenges

- Pro-family policies, emphasis on training and development and keeping the workplace safe continue to be important aspects of attracting and retaining staff.
- Nurturing staff to build a competent workforce and drive business growth under challenging market conditions remain key.
- A maturing workforce also places importance on the need to build a steady stream of young blood to join the Company through industry scholarships and work-learn programmes.
- Correspondingly, the Company is also looking into ensuring a seamless transfer of knowledge between generations and building succession pipelines.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index



1
2
3
4
5

About This Report
Identity
Messages From The Top
Delivering Value
Sustainability

6

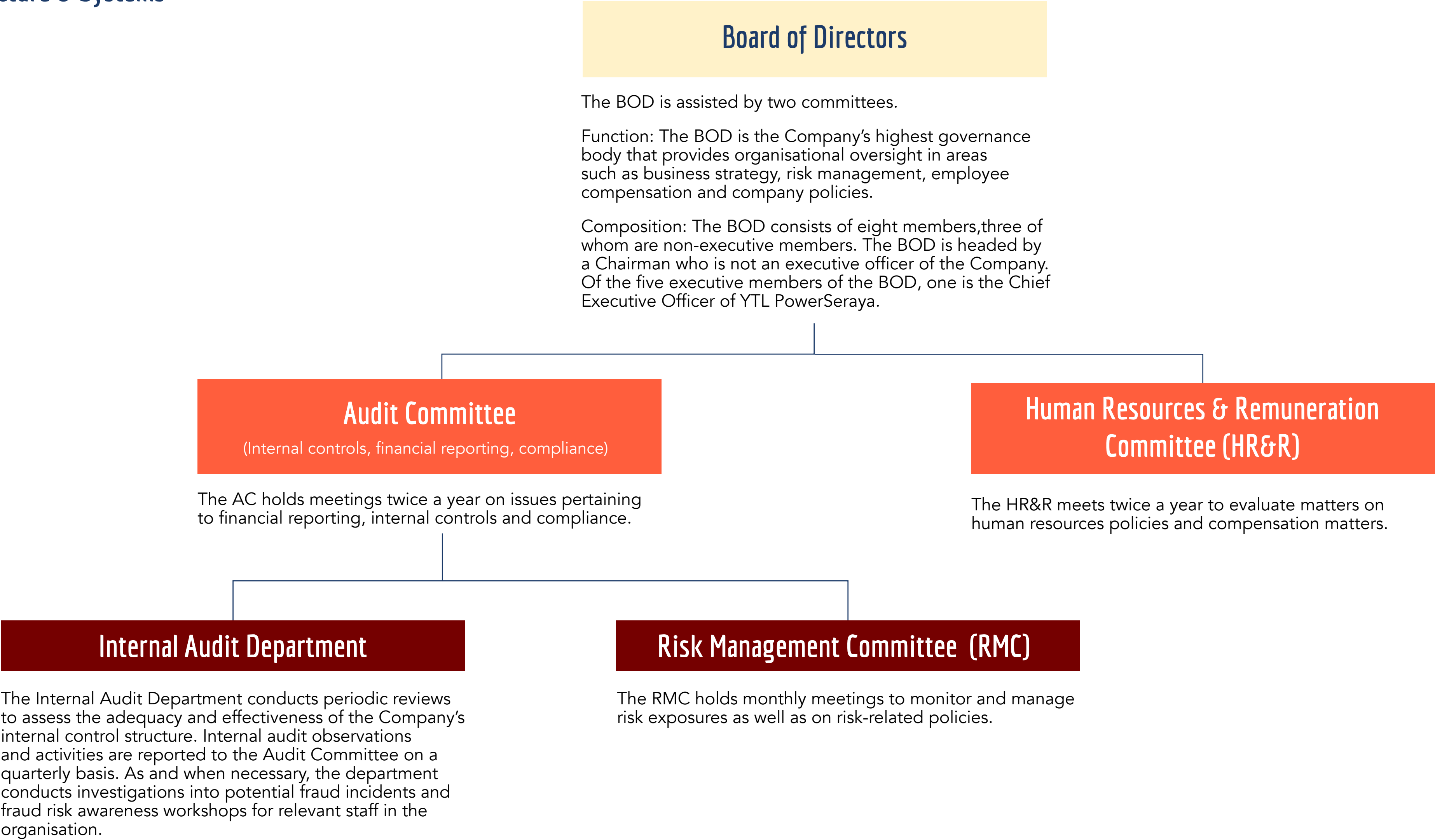
Governance

7
8

Environment
Social

We work as ONE to create long-term value for our shareholders. Our people's combined business, management and professional expertise not only provide the core competencies to meet ever-changing needs, but also allow for diverse and objective perspectives on the Group's strategic direction and growth.

Structure & Systems



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

How Sustainability Matters are Handled

The Environmental, Social and Governance (ESG) matters in the company are managed and guided largely by existing governance structures and mechanisms, including the ISO 27001 management system on cyber security, to ensure that the company’s activities are operated in a responsible and ethical manner.

The Quality, Health, Safety & Environment (QHSE) working committee is responsible for the proper function of the company’s ISO management systems to ensure that environmental as well as safety & health issues are managed in addition to business quality objectives. Environmental issues are managed and guided by the ISO 14001 environmental management system where targets for CO2 emissions, auxiliary energy usage, wastewater discharge quality, chemical spills and oil spills are tracked regularly via

the ISO yearly audits. Safety and health issues, on the other hand, are managed via the OHSAS 18001 safety management system where accident frequency and severity performances are benchmarked to the Singapore All Industries Average.

The Facilities, Safety & Sustainability department is headed by a senior manager who sits in the Quality, Health, Safety & Environment (QHSE) and Workplace Safety & Health (WSH) committees and who concurrently leads a Carbon Taskforce on carbon tax and climate change related issues with a direct report to the CEO. The Sustainability function complements HR’s role in organising employee engagement activities. These include community outreach initiatives to educate youths and customers on energy and water, activities to give employees opportunities to support the company’s adopted charitable programme as well as to inculcate a sustainability mindset amongst employees through the Eco-Office initiative.

Board’s Supervision of Company’s Performance and Communications Within the Company

YTL Power International Berhad, as the parent company, appoints the directors on the Board of YTL PowerSeraya. There are no minority shareholders in YTL PowerSeraya. Candidates for appointment as directors to the Board are assessed based on qualifications and experiences by the Company’s shareholders and takes into account the prevailing composition of the Board’s expertise and the desired profile.

The Board meets on a quarterly basis for progress updates on the Company’s performance. It provides advice and strategic direction to address issues facing YTL PowerSeraya. Issues covering financial, environmental and social subjects are tabled and discussed regularly at the Board level.

The quarterly Board meeting is also a formal channel for employees to table recommendations through Board papers that would have been vetted by the respective heads of business divisions for materiality and relevance.

Executive directors also participate in weekly senior management meetings where strategic and operational issues covering the Company’s economic, environmental and social performance are presented and discussed. The Senior Manager (Facilities, Safety & Sustainability) – who oversees issues and initiatives pertaining to sustainability and currently leads the Carbon Taskforce – reports directly to the Chief Executive Officer on carbon-related matters.

The Board is assisted by the Audit, Risk Management and Human Resources & Remuneration Committees. These Committees help the Board formulate strategies and make informed decisions on a wide range of organisational issues. When necessary, the Board appoints external consultants and auditors to provide additional expertise and advice on specific company matters.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Linkage Between Company Performance and Compensation for Board Members and Employees

The members of the Board are not paid director’s fees for their roles and responsibilities. Executive directors however, are remunerated. All of the Company’s employees are covered under an established and structured performance management system where bonus and remuneration are tied to the performance of both business groups and individuals.

This includes the environmental performance of power plant operations and environmental initiatives organised or supported by the organisation for employees and the community. The Company’s social performance is also considered, which covers various community programmes as well as human capital matters.

The wage increase and variable bonus exercise conducted annually by the Company takes into account inputs from independent consultants, the Singapore National Wages Council (NWC) and UPAGE (Union of Power and Gas Employees) in order to arrive at the proposed remuneration package for employees. To guide decisions on wage increases, the Company takes into consideration the NWC guidelines and surveys from independent remuneration consultants. The annual variable bonus is determined based on the Company’s financial performance and industry benchmarks and practices. For bargainable staff, the wage increase and variable bonus payment are negotiated with UPAGE every year. All these inputs culminate into a set of annual wage increase and variable bonus payout recommendations, which are reviewed and endorsed by the HR & Remuneration Committee.

To ensure that YTL PowerSeraya’s remuneration practices are competitive, the Company participates in remuneration benchmarking every year with independent consultants. From time to time, the Company also engages independent consultants to review salary structures for external equity and market competitiveness. A Collective Agreement Negotiation that occurs every three years with the UPAGE ensures a regular review of the salary structure and benefits provisions for bargainable staff.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Culture

YTL PowerSeraya’s VIBRANT values guide our employees’ behaviours, attitudes and relationships to form the organisation’s working culture.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

This set of Core Values is complemented by the Code of Conduct to help nurture healthy and positive employee relations and an organisation that strives for business excellence while upholding high levels of integrity and accountability.



Code of Ethics

The Company’s Code of Ethics may be found [here](#).

Procuring Responsibly

The Company’s operations are based solely in Singapore - a country with no natural resources, including oil and gas. In the absence of local oil and gas suppliers, YTL PowerSeraya relies on overseas suppliers to fulfil its fuel oil and natural gas supply needs. While the Company does not have a policy for selecting local-based suppliers, most of its non-oil related goods and services purchased by YTL PowerSeraya and its subsidiaries are from local suppliers. In FY2016/17, 442 suppliers – of whom 96% are local – were engaged to deliver close to \$74 million worth of non-oil related goods and services for the company.

To ensure that purchases of company goods and services are conducted in a responsible and fair manner, employees with the authority (including members of the Board) to support and approve purchases are required to declare conflict of interests, if any, as part of the procurement process.

Under the Company’s Responsible Procurement Policy, the supplier qualification process screens for suppliers with certified management systems such as the ISO14001 before they are granted ‘Approved Vendor’ status. 5.4% of the goods and services provided by the Company’s suppliers (as measured by goods receipts value) were screened for their environmental credentials in FY2016/17. Only suppliers with significant contract values of S\$100,000 and above are subject to environmental criteria screening under the Company’s current procurement practices.

Percentage of Spending by Company to the Local Economy

Based on Purchase Orders Issued (Non-Oil)	
Year	Local (%)
FY2012/13	92.7%
FY2013/14	99.4%
FY2014/15	98.6%
FY2015/16	98.5%
FY2016/17	95.7%
5-Year Average	97%

Supplier Conduct

All suppliers/vendors providing goods and services to the Company are required to abide by the terms and conditions stated in the contract documents. The terms and conditions issued at the RFQ (Request For Quotation) stage (governing compliance to local laws and regulation relating to environmental, health and safety laws, the use of illegal foreign labour, the use of child labour, fair wages for their workers and freedom of their workers to join trade unions) are more stringent for contracts of higher value and for works and services.

In addition, the Code of Conduct for Contractors and Contract Workers in the Power Station (specifying guidance on safety, health and welfare) are issued at the RFQ stage for suppliers of works and services of higher contract value.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Grievance Mechanisms

Internal Grievance Handling

YTL PowerSeraya recognises the value and benefits of open communication and mutual discussions. In situations where an employee feels aggrieved or in disagreement with any Company practice, he may discuss such matters with the Management or HR department. The employee and/or his immediate supervisor are encouraged to settle the differences at their level, and will be escalated to a higher level only if there are strong grounds to show that the grievance cannot be satisfactorily resolved at that stage.

Environmental Grievance Handling

The Company’s ISO 14001 Environmental Management System covers complaints or grievances raised by external parties on environmental matters. Under this procedure, environmental complaints are captured in the Environmental Communications Log and escalated to relevant departments for resolution as well as the Corporate Communications Department for external communications management where required. There were no environmental grievances raised in FY2016/17.

Labour Practices and Human Rights Stance

There were no discriminatory incidents raised via the grievance handling channels in FY2016/17. For a full understanding of the Company’s labour practices and its stance on human rights issues, please visit this link: <https://ytlpowerseraya.com.sg/sustainability/governance/human-rights-2/>

Managing Fraud Risks

A Fraud Risk Management (FRM) framework and policy exists in the company to protect the interests of shareholders, employees as well as other stakeholders who have dealings with the Company. The overall responsibility of the FRM framework lies with the Chief Risk Officer.

For FY2016/17, close to 88% of the Company were analysed (versus 86% the previous FY). The FY2016/17 Internal Audit findings revealed no fraud cases during this period. In an effort to promote fraud risk awareness to employees, five educational sessions were organised within FY2016/17 (versus two workshops the previous FY). Employees can also play their part in fraud prevention by reporting any reasonable suspicion of fraud or other forms of corruption under the Company’s whistle-blowing policy.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Managing Risks

A precautionary approach is taken at YTL PowerSeraya to protect the enterprise value of the company. A structure is in place to manage risks at all levels starting from the Board of Directors right down to the risk owners of the different business units. The Board of Directors are responsible for determining the type and level of risks that the Company undertakes in achieving its corporate objectives. This is achieved through the enterprise-wide corporate risk statements, framework and policies approved by the Board. Because of the changing business environment and for alignment with the company strategy, a risk posture statement defining the Group’s risk appetite is submitted and approved by the Board of Directors on an annual basis. The Board delegates the authority to formulate, review and approve non-major policies on the monitoring and management of risk exposures to the Risk Management Committee.

The Risk Management Committee (RMC) which meets monthly to deliberate on enterprise-wide risk matters, proposes and recommends major risk-related policy decisions to the Board for approval. The RMC is chaired by the Chief

Executive Officer. Members include the Chief Risk Officer, senior management of various business groups the Head of Enterprise Risk Management and a member from the Board of Directors.

Under the risk management framework, all business units are required to identify enterprise risks for their respective businesses. This includes environmental and social risks such as oil spills, pandemic disease outbreaks, human capital loss as well as health and safety risks. Through a filtering process of the identified risks, a list of significant risks is established and subsequently documented in the Corporate Risk Register. The business units are required to implement mitigation control measures to minimize the significant risks.

Regular risk monitoring and reporting are administered by the Enterprise Risk Management (ERM) Department to enable early detection and escalation of risks for review and appropriate action where necessary. The ERM Department collates all reports from the risk owners on a half-yearly basis. The ERM Department works hand-in-hand with the various business units to manage the risks of the company such as credit and operational risks.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index



Enterprise Risks in the Near Future

In recent years, fluctuating oil prices led to volatilities in financial and commodities markets. Slow growth in the global economy, an oil supply glut as well as uncertain political climates in the United States and the United Kingdom also contributed to volatile markets. This trend is expected to continue in the near future, and this presents considerable risks to the power generation business in Singapore as electricity prices move in tandem with global oil prices.

As a major consumer of natural gas in electricity generation, the company’s costs are affected by movements which impact fuel oil prices. Given the uncertainty in oil and gas markets, it is imperative that the company study the resulting risks and implement risk management mechanisms to manage market volatilities. These include setting tighter limits in open exposure and optimising the usage of hedging instruments to maximise returns amid volatilities in the market.

Looking ahead, there is growing optimism in the recovery of global oil and gas prices. This is underpinned by the continued oil supply-cut pact agreement within the Organization of the Petroleum Exporting Countries (OPEC), coupled with the expected recovery of the global economy.

However, geopolitical tensions particularly in the Korean peninsular and Middle East region may continue to present uncertainties in global markets and thus dampen recovery in oil and gas prices.

Based on the Singapore Energy Statistics 2016 by the Energy Market Authority, the industrial-related sectors contributed 42.3% of the total consumption of electricity. The performance of this sector, particularly petrochemicals and oil refineries, is largely affected by movement in oil and gas prices. Consequently, the recovery of oil and gas prices can lead to higher production from this sector, which augurs well for the growth of electricity demand in Singapore.

In light of the above, the Enterprise Risk Management (ERM) department continues to keep abreast of such externalities that may have potential risks to the company’s operations. At the same time, the department seeks to ensure that its current risk management processes are effective in minimising the company’s risk exposure.

On the retail front, the potential of credit risks with counterparties exists. In the current challenging environment, emphasis is placed on ensuring the financial stability of counterparties and its ability to fulfil its obligations.

With the impending open electricity market in the second half of 2018, 1.3 million households will be given the option to select their own electricity retailer. As the Company plans to increase the acquisition of these smaller household accounts, the risk of delayed payments or default in payments may be higher. Thus, the ERM department shall ensure necessary measures e.g. collection of security deposit, are taken to mitigate this risk.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index





1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance

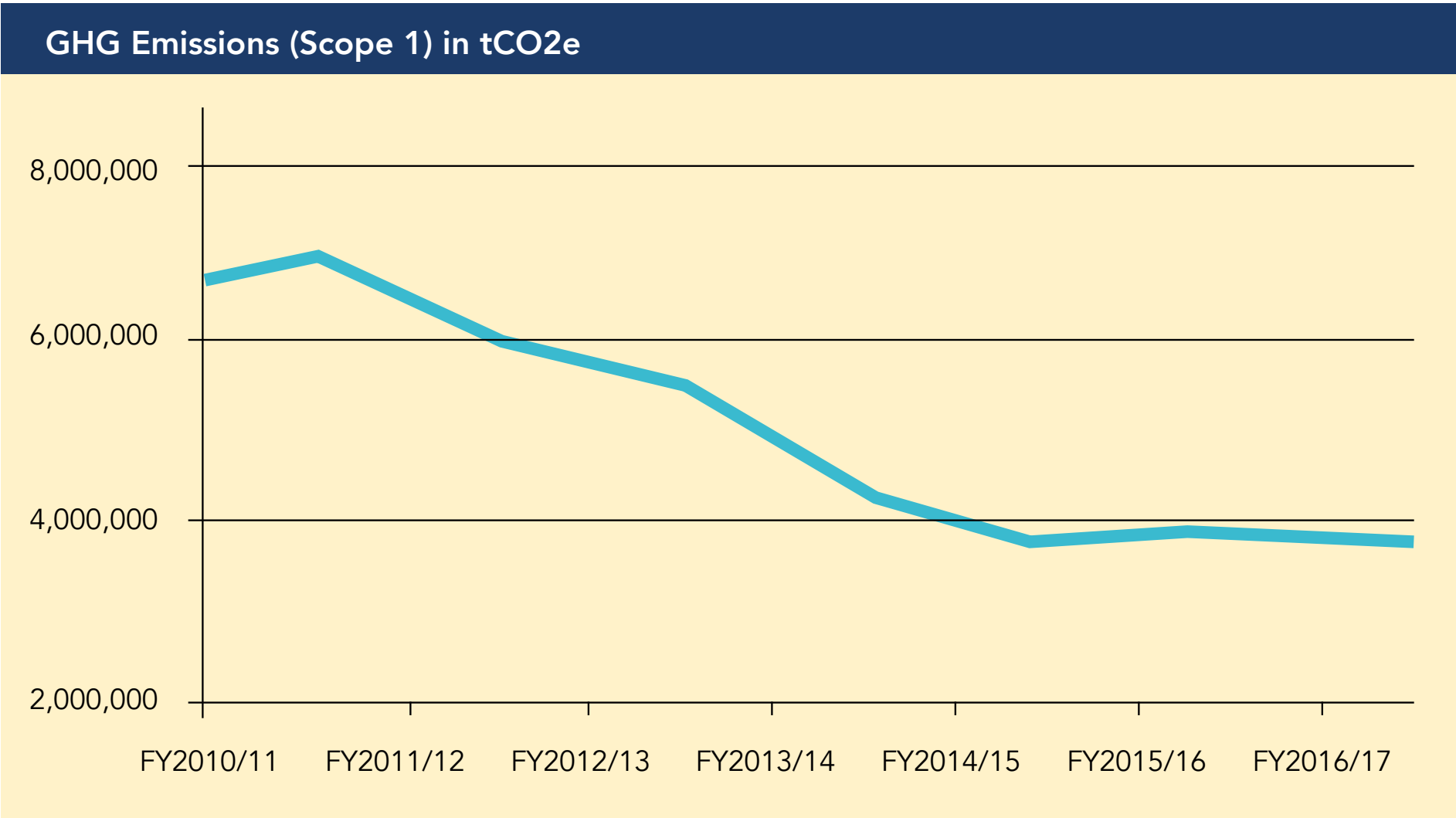
7 Environment

8	Social
---	--------

We are ONE with the environment. All our operations are conducted with a deliberate focus to minimise our impact on the environment. We also empower individuals to make a difference in the way we live by setting a prime example for all.

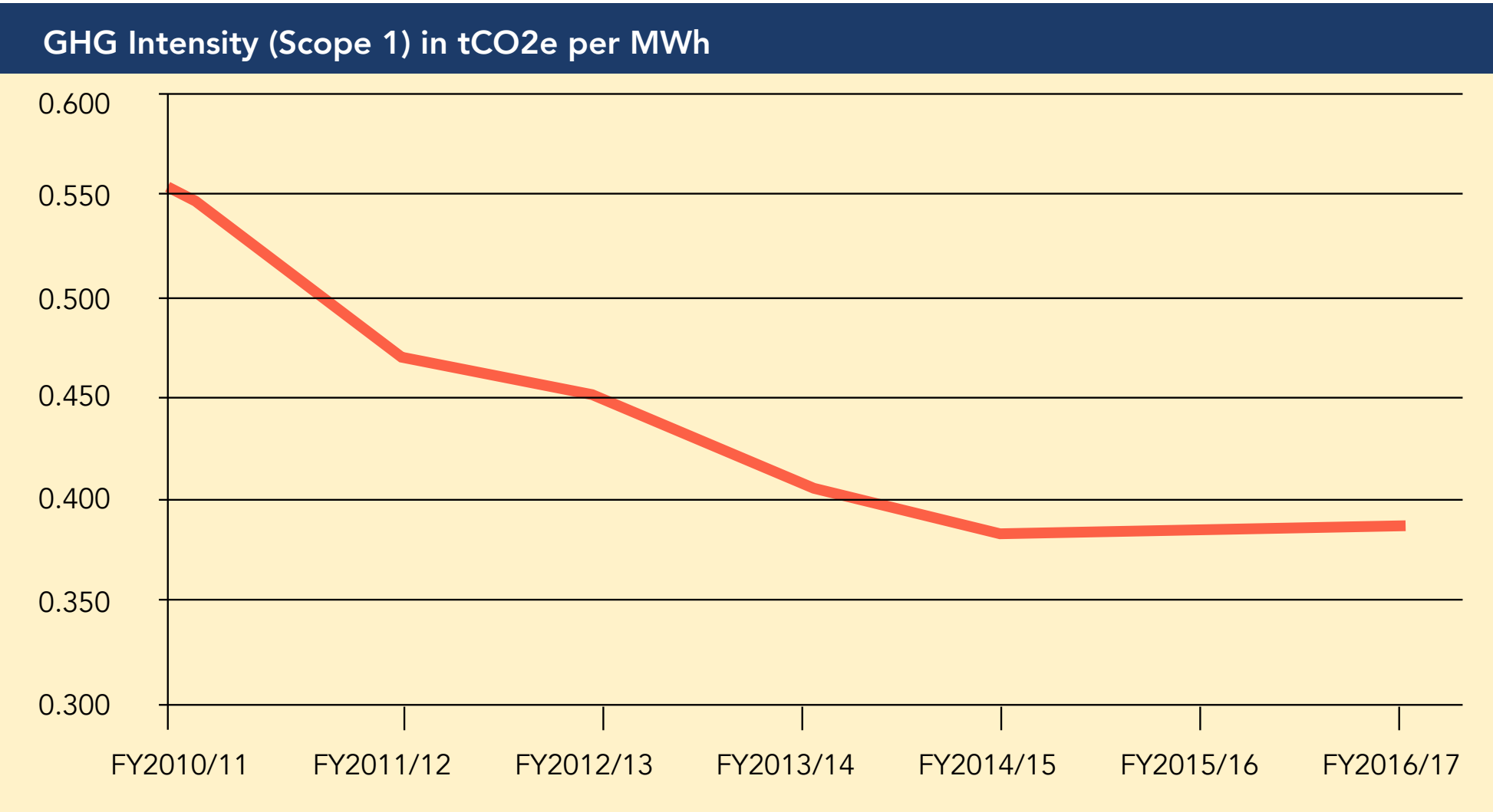
For FY2016/17, Greenhouse Gas Emissions (GHG) from power plant operations is about 40% lower than it was in 2005. On per energy unit terms, GHG emission levels for every energy unit produced in FY2016/17 are 33% lower than it was in 2005.

GHG Emissions



This emissions reduction over the years was achieved through a progressive switch from heavy fuel oil to less carbon-intensive natural gas, as well as investments in more energy efficient power generation plants with co-generation capabilities.

Since the setting of GHG targets in FY2013/14, the Company has managed to keep its GHG Intensity below the 0.40 tCO2e per MWh target in three out of the four financial years to-date. This has been achieved largely through planned and regular maintenance and plant condition monitoring regimes to bring existing power plants back to efficiency levels close to design limits. A total of eight planned maintenance overhauls were conducted in FY2016/17, covering most of the baseload gas-fired and back-up oil-fired power plants units. For the past several years, overall plant efficiency has been maintained at around 52%.



Moving forward, the Company is looking into implementation processes which seek to optimise the gas-fired plants’ performance by minimising the frequency of its efficiency dips. The feasibility of this initiative would have to be considered against technical and cost considerations.

The Company is also looking into the renewables space despite physical and commercial constraints in Singapore. Lack of incentives such as the feed-in tariff or its equivalent has made adoption of renewable energy in Singapore challenging. To overcome the challenge of installing utility-scale solar plants in Singapore, the Company is exploring solar rooftop solutions for its customers.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index



Carbon Tax Implications

The Government’s proposed carbon tax pricing of S\$10 to S\$20 per tCO₂e translates to an estimated S\$40 to S\$80 million in carbon taxes for the company. Industry discussions with the government are underway to pass-through the tax (full/partial) to end-consumers. Implementation of a carbon tax scheme will provide opportunities to encourage users of the entire energy chain to reduce GHG emissions. The company will continue to run its plants as efficiently as possible and explore renewable energy. At the same time, the company will continue to educate customers on energy conservation.

Water Consumption

YTL PowerSeraya has been relatively self-sufficient in water, with about 92% of its water needs at the power plant met by its in-house desalination plant and close to 7% met from reclaimed water (i.e. NEWater). Less than 2% of plant water needs come from freshwater sources. Plant water consumption increased by 22% versus the previous year, due mainly to increased sales in high purity steam and potable water. Based on per unit of energy produced, water intensity (m³ per MWh) increased slightly by 2.2% compared to the previous year.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Environmental Indicators (Table C)

Env Theme	GRI Index	GRI Index Description	Environmental Performance Indicator			Comment on FY2016/17 Performance (vs previous FY)
			FY2014/15	FY2015/16	FY2016/17	
Material Use	GRI 301-1	Materials used by weight or volume	Top 3 Chemicals Used			Increased use of Sodium Hydroxide and Sulphuric Acid due to more potable water produced and slight increase in running oil-fired plants Note : Chemicals mentioned are used for production of electricity, steam and potable water
			Sodium Hydroxide (0.0434 kg/MWh)	Sodium Hydroxide (0.028 kg/MWh)	Sodium Hydroxide (0.039 kg/MWh)	
			Limestone (0.0303kg/MWh)	Sulphuric Acid (0.013 kg/MWh)	Sulphuric Acid (0.024 kg/MWh)	
			Sulphuric Acid (0.026 kg/MWh)	Sodium Bisulfite (0.020 kg/MWh)	Sodium Bisulfite (0.021 kg/MWh)	
Energy	GRI 302-1	Energy consumption within the organisation (non-renewable sources)	Natural Gas and Fuel Oil consumed for power and steam generation			Over the past 3 years, more than 99% of the total energy generated from power plants come from natural gas.
			Natural Gas 66,641,257 GJ	Natural Gas 69,579,634 GJ	Natural Gas 66,987,962 GJ	
			Heavy Fuel Oil & Diesel 254,597 GJ	Heavy Fuel Oil & Diesel 255,060 GJ	Heavy Fuel Oil & Diesel 646,582 GJ	
Energy	GRI 302-3	Energy Intensity for Electricity & Steam (defined as energy consumed for electricity and steam generation operations (i.e. house load) divided by energy output (i.e. electricity and steam generated))	29.9	26.4	26.6	0.76% increase due mainly to an increase in house load. The run-up of oil-fired plants arising from a period of LNG supply curtailment led to the slight rise in house load. Specific energy use data are submitted online to National Environment Agency's EDMA (Energy Data Monitoring & Analysis) system on an annual basis as part of the regulatory requirement under the Energy Conservation Act
Energy	GRI 302-4	Reduction in Energy Consumption (i.e. house-load consumption) versus Base Year FY2012/13 for Electricity & Steam	193,824 MWh (697.77 TJ)	218,996 MWh (788.39 TJ)	224,860 MWh (809.50 TJ)	The past 3 years saw consistent reductions in house load energy consumption (versus base year FY12/13) due to continual maintenance of power plant systems and equipments.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Environmental Indicators

Env Theme	GRI Index	GRI Index Description	Environmental Performance Indicator			Comment on FY2016/17 Performance (vs previous FY)
			FY2014/15	FY2015/16	FY2016/17	
Water	GRI 303-1	Water withdrawal by source (in m3)	Total = 1,858,792	Total = 1,549,750	Total = 1,893,353	22.2% increase in total water consumed due to an increase in steam and potable water sales to customers.
		a. Desalinated water from seawater	1,605,988 (86.4%)	1,407,726 (90.8%)	1,735,886 (91.7%)	
		b. Waste Water (reclaimed waste water from other industries, recycled water (i.e. Singapore's NEWater, Industrial water)	200,957 (10.8%)	106,280 (6.9%)	126,984 (6.7%)	
		c. Municipal water supply (i.e. Town Water)	51,848 (2.8%)	35,744 (2.3%)	30,483 (1.6%)	
		Water intensity (m3/MWh) Note : Steam sold to customers is excluded	0.091	0.047	0.048	Water consumption per unit of energy generated at the power plant remains relatively unchanged
Water	GRI 303-3	Water recycled and reused (in m3)	85,072	91,210	92,232	Recycling rate for water dipped marginally by 1.01 percentage points. This is due primarily to the higher volume of desalinated water used to produce demineralised water to generate high purity steam.
			4.58%	5.88%	4.87 %	

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Environmental Indicators

Env Theme	GRI Index	GRI Index Description	Environmental Performance Indicator			Comment on FY2016/17 Performance (vs previous FY)
			FY2014/15	FY2015/16	FY2016/17	
Energy	GRI 305-1	Direct (Scope 1) GHG Emissions in tCO2e	3,757,783	3,922,630	3,807,575	Direct Emissions (Scope 1), form the main bulk of GHG emissions, 2.9% decrease from previous FY due mainly to a drop in energy production which outweighed the running of oil-fired plants during the LNG curtailment period.
Energy	GRI 305-2	Energy indirect (Scope 2) GHG emissions in tCO2e	193.9	184.4	176.8	Indirect Emissions (Scope 2 & 3) , which comprise only 3% of total GHG emissions, increased 8.6% due mainly to electricity purchased from the electricity pool to meet customer demand.
	GRI 305-3	Other indirect (Scope 3) GHG emissions in tCO2e	161,064	109,550	119,039	
Energy	GRI 305-4	GHG Emissions Intensity (tCO2e/MWh) Scope 1 only	0.385	0.389	0.389	GHG Emissions Intensity (Scope 1) remains unchanged from previous year. It is also within the 0.40 tCO2e/MWh target set since FY13/14 and reviewed every 3 years.
Energy	GRI 305-5	Reductions in GHG Emissions (from baseline year FY2012/13) (in tCO2e/MWh) Scope 1 only	1,789,567	1,624,720	115,055	A smaller reduction in GHG emissions was achieved in line with lower GHG emitted.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Refer to figure B (page 43) for Direct & Indirect GHG Emissions (in metric tons).

Environmental Indicators

Env Theme	GRI Index	GRI Index Description	Environmental Performance Indicator			Comment on FY2016/17 Performance (vs previous FY)	
			FY2014/15	FY2015/16	FY2016/17		
Air Pollution	GRI 305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions (in kg/MWh)	SO2 - 0.00145	SO2 - 0.0065	SO2 - 0.0271	SO2 emissions per energy unit produced increased three fold over the last FY due to the greater running of oil-fired plants.	
			NOx emissions is insignificant and thus not measured				
Waste	GRI 306-1	Water discharge by quality and destination (in m3)	97,613	114,503	80,854	Less water is discharged into the open sea due to a drop in rainwater collected for plant processes. Over the past 3 years, the quality of wastewater discharged into the sea has consistently met regulatory limits set by the NEA who regularly takes random water samples for water quality tests.	
			BOD:	< 10mg/L	< 10mg/L		< 10mg/L
			COD:	<40mg/L	<40mg/L		<40mg/L
			TSS:	<10mg/L	<10mg/L		<10mg/L
			Total Metals:	<1mg/L	<1mg/L		<1mg/L
			Oil & Grease:	<5mg/L	<5mg/L		<5mg/L
			Temperature:	< 30°C	< 30°C		< 30°C
Waste	GRI 306-2	Waste by type and disposal method (in metric tonnes)	Total Industrial Waste (mainly EP ash, wastewater treated sludge)	686.27	517.65	314.33	23.5% drop in waste generated. The decrease is due mainly to a significant drop in industrial waste from standby oil-fired power plant units which were rarely operated in the FY.
			Waste with Gypsum	Nil	Nil	Nil	
			General Waste (horticulture & general waste)	310.84	223.89	265.3	
			Recyclable waste	389.45	32.83	12.81	
			Total Waste	1386.56	774.33	592.44	
			Top 3 recyclable waste items:	Used fuel oil, used lube oil and scrap metal	Used fuel oil, used diesel and empty Drums.	Used fuel oil, used diesel and used lube oil	

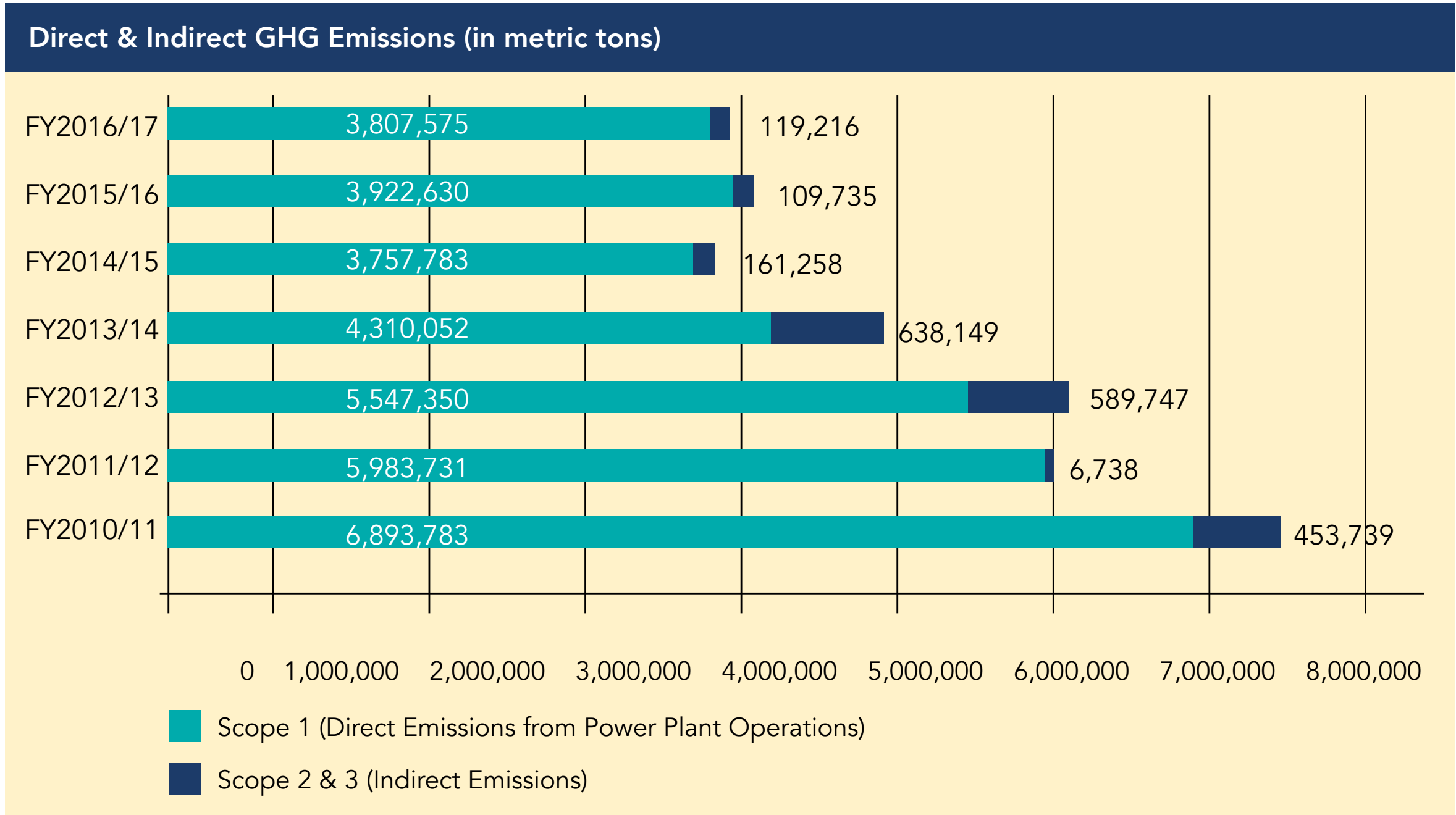
1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Environmental Indicators

Env Theme	GRI Index	GRI Index Description	Environmental Performance Indicator			Comment on FY2016/17 Performance (vs previous FY)
			FY2014/15	FY2015/16	FY2016/17	
Water Pollution	GRI 306-3	Significant spills	Zero chemical and oil spills consistently over the past 3 years			
Land/Water Pollution	GRI 306-3	Transport of hazardous waste	Zero hazardous waste transported under the Basel Convention over the past 3 years			No gypsum produced over the past 3 years as oil-fired power plant units were hardly operated.
Compliance	GRI 307	Non-compliance with environmental laws and regulations	No fines nor non-monetary sanctions imposed for non-compliance with environmental laws and regulations over the past 3 years			An effective environmental management system has enabled the company to operate responsibly, thus complying to environmental regulations.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Figure B





1
2
3
4
5
6
7

8

About This Report
Identity
Messages From The Top
Delivering Value
Sustainability
Governance
Environment

Social

Our company's corporate social philosophy believes in the significance of the individual and their role in the community as ONE. This tenet extends to our active involvement in charity as well as ongoing schemes to nurture employees and their families, evolving them into inspiring leaders at work and within their communities.



Building Social Capital

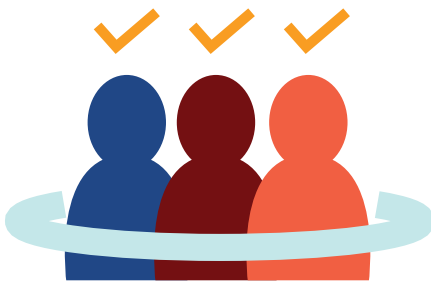
Human capital consists of the knowledge, skills and experience of the Company as a competitive intangible asset that drives value in the organisation. Social capital is about relations with internal and external stakeholders that facilitate action for the interests of the Company, stakeholders and the society.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

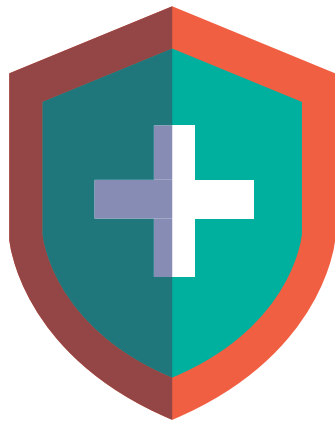
Building Social Capital



Contributed
S\$3.95 mil
to employee’s social security*. This covers
98.1% of the company’s total workforce



100%
of senior management are
hired from the local community



Health & Safety

**Zero Workplace
Fatalities**

**1 Minor workplace
Accident**

Employee Health Better
than National Average in
**3/4 Health
Indicators**

*Hypertension, Obesity Diabetes,
High Cholesterol



Activities that promote family bonding and healthy living

**69 Workplace
Health Activities**

**4 Family Bonding
Activities**

*In Singapore, this refers to the Central Provident Fund, a compulsory comprehensive savings plan for working Singaporeans and permanent residents primarily to fund their retirement, healthcare and housing needs.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Stakeholder Engagement

YTL PowerSeraya believes in fostering lasting partnerships with its key stakeholders to innovate and grow in balance with the environment and society. These partnerships forged over time had enabled the Company to fulfill its CSR Thrusts of 'Building Strategic Partnerships' while contributing to SDG 17 'Partnerships for the Goals'.

Consultations with the Government

Carbon Tax

The Singapore government announced in February 2017, their plan to impose a carbon tax on upstream, direct emitters starting year 2020 for 2019 GHG emissions.

Since then, there have been consultations between the government agencies and power industry players (including YTL PowerSeraya) on carbon tax. During the consultation sessions, the Company has expressed concerns whether the proposed carbon tax policy of imposing upstream direct emitters like power generators would bring about the intended outcome of sending the right price signal to end consumers of energy and that everyone has a role in climate change action. Also of concern is the ability of power generators to absorb the carbon tax given the depressed power sector and the unsustainable electricity market prices.

Through an initial meeting requested by the Energy Market Authority (EMA), the Company shared the challenges of achieving energy efficiency improvements of its existing gas-fired plants and to gather feedback on existing government funding schemes for energy efficiency improvements.

Secondary Gas Trading Market

Following a feedback sharing session hosted by the Energy Market Authority in April 2016 on the establishment of a secondary gas trading market, an industry working group was formed, which included YTL PowerSeraya. So far, two industry working groups meetings were held in 2017 to look into the design, rules and implementation of the secondary gas trading market. Further meetings are expected by the working group before a report is put out for public consultation in 2018.

Open Electricity Market

It was announced on 26 Oct 2015 that open electricity market is targeted to start in 2H 2018. With open electricity market, all electricity consumers including households would have the option to choose their preferred electricity retailer. YTL PowerSeraya's subsidiary, Seraya Energy, has been actively involved in the consultation on its implementation, including the consumer protection and price comparison framework.

Gas Network Code Changes

YTL PowerSeraya has been involved in the consultation process on proposed changes to the Gas Network Code relating to tightening of the Use-It-Or-Lose-It provisions ("UIOLI"). Tightening of the UIOLI provisions is beneficial as it will mitigate pipeline capacity hoarding, allowing for a more competitive gas market.

Regulatory Sandbox

The Energy Market Authority has proposed the introduction of a Regulatory Sandbox which allows for testing of innovative energy solutions or services for a defined period of time during which legal and regulatory requirements are relaxed. YTL PowerSeraya has participated in the consultation and is supportive on the premise that adequate safeguards are implemented to prevent abuse or negative impact on others.



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Engagement with Customers (Stakeholder Relations & Partnerships)

In February 2017, Seraya Energy held its 10th Forex and Oil Symposium to provide customers with industry insights on issues ranging from the LNG landscape to oil and the foreign exchange markets. This year’s Symposium line-up also included a speaker from the National Climate Change Secretariat, who covered Singapore’s approach towards climate change.

In addition, decade-long customers celebrated the anniversary event with the energy retailer and received a special token of appreciation for their support through the years.

For the tenth consecutive year since 2008, YTL PowerSeraya who has organised its own Earth Hour observance also engaged customers to do the same, to switch off non-essential lights from 11am through lunchtime as part of the Earth Hour effort.

With market liberalisation taking place in 2018, Seraya Energy seeks to further add value to its customers with a focus on enhancing and reframing the digitalisation of customer portals for an enhanced seamless customer experience.



Ms. Connie Kwan
Co-founder & COO,
Aalst Chocolate Pte Ltd

“Seraya Energy has been a part of the Aalst Chocolate Family since the company started in 2003 and it has been a pleasant journey.

We are glad that Seraya Energy constantly delivers reliable and good power rate options with excellent customer service. Their patience and dedication in understanding our business has provided us both short and long term flexible options that is key in today’s bottom-line driven business climate.

They have also eased our payment lead time through their customised and innovative payment methods.

With their professionalism and deep market insights, Seraya Energy has certainly evolved from being a supplier to our long-term business partner.”

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Union, Management Engagements

Union-management relations have grown from strength to strength over the years. This consultative and collaborative partnership is especially crucial to the long-term sustainability of the Company, as the power sector continues to face strong headwinds of intense competition in Singapore.

All employees of the Company have the freedom to join the Union of Power and Gas Employees (UPAGE). As of 30 June 2017, about 45% of the workforce is covered by the Collective Agreement (CA) and about 90% of the Company’s workforce are UPAGE members.

The UPAGE and the management meet formally about two times a year to discuss workforce issues such as employee development and growth, rewards and benefits and health and well-being. On an informal basis, meetings are also held to resolve any ad-hoc issues that may arise in the year. One UPAGE representative is a member of the Company’s Workplace Safety and Health (WSH) Committee and attends its monthly committee meetings to provide union inputs to address employee safety and health concerns.

A significant development in the year is the successful conclusion and signing of the Collective Agreement (CA) for another three-year term (2016 to 2019). The latest CA reflected the company’s continual emphasis on competitive rewards and benefits for its employees, including the introduction of a new pro-family leave category called “Family Care Leave” of two days.

Although there is no formal provision in the CA on the minimum notice period for significant operational changes, the company has been in practice of engaging and consulting the union on most matters affecting employees ahead of implementation timeline.

It also takes guidance from the prevailing employment laws and guidelines in Singapore in the implementation and communication of any significant change affecting employees.



Mr. Tay Seng Chye
President,
Union and Gas Employees (UPAGE)

“YTL PowerSeraya recognises the value-adding role UPAGE plays in being the collective voice of employees. Our collaborative participation over the years has resulted in many mutually-beneficial arrangements.

UPAGE will continue to work closely with the management to realise common aims of strengthening the employee value proposition, and ultimately the capability of the Company.”

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Engagement with Suppliers

With electricity and high purity steam as major revenue streams of the company, keeping the gas-fired power plant units running in tip-top condition is important for the Company. For many years, the Company has maintained a close working relationship with Siemens. As a major supplier of maintenance services and parts, Siemens has provided expertise and experience in ensuring that critical plant assets such as the gas and steam turbines and generator are functioning properly and optimised for performance. This is done through periodic scheduled inspections and upgrades of the natural gas-fired power generating assets starting with the first combined cycle plant in 2002.

A recent example of the close working relationship between the Company and Siemens was the successful execution of the major inspections in 2014 and 2015. Together, the major outages for the gas-fired plants were successfully completed within the targeted time frame and in a cost effective manner. The major outages required very detailed planning as GT blades and vanes refurbishment, parts ordering and detailed field service work had to be executed within a compressed time frame.

The Company and Siemens have, on a continual basis, worked on various cost reduction initiatives, power output increase, NOX reductions and efficiency measures. On a regular basis, Siemens has also helped the Company improve startup reliability and plant availability. In FY2016/17, the company registered reasonably high availability and reliability for all its gas-fired plants.



Mr. Andreas Tschickardt
Senior Vice President, Energy Service
Siemens Pte Ltd

“Siemens is glad to be YTL PowerSeraya’s trusted partner in maintenance services to support the company’s continuous drive towards excellence in optimising plant performance.

We value the long working relationship with the company and look forward to many more collaborations with them to support their future developments.”

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Society And Communities - Proactive Outreach And Care

As a responsible corporate citizen, YTL PowerSeraya organises various programmes that reach out to the local community including youths and the disadvantaged in society. Last year, the Company’s flagship sustainability initiative ‘Responsible Energy Advocates Programme’ engaged 19 tertiary students on energy conservation initiatives. The programme saw them develop smartphone applications and conduct eco-experiments along the theme of ‘Energy Is Life’. At the same time, the Company’s water programme PLAY (Punggol Learning Adventure for Youths) educated 255 upper primary and secondary students on water issues via an educational trail facilitated by our programme partner, Waterways Watch Society.

Another learning platform the Company invested in include the Energy Learning Hub (ELH), which was established in year 2009. This learning hub is located at the premises of YTL PowerSeraya’s adopted school, Greenridge Secondary School and consists of interactive, multi-media features that provide an interesting platform to engage students in creative learning. In FY2016/17, the school hosted about 60 student visitors from overseas schools who were keen to learn more about energy and climate change.

Further, to reach out to the disadvantaged in society, the Company organises initiatives in aid of the Goodwill Rehabilitation & Occupational Workshop (GROW). This is a sheltered workshop under the umbrella of the Cerebral Palsy Alliance Singapore for persons with cerebral palsy. Last year, the company raised close to \$7,000 to support GROW. Several initiatives such as ‘Make A Difference’ and ‘Give Your Trash A Second Life’ seeks to engage Company staff in meaningful activities to help GROW. They include the donation of second hand items to GROW’s Thrift shop as well as mini projects to improve the home living conditions of GROW individuals.



“YTL PowerSeraya has been an invaluable partner and supporter of CPAS since 2011. YTL PowerSeraya’s support of our trainees at the Goodwill, Rehabilitation and Occupational Workshop (GROW) is a shining example of how corporate organisations can do their part to nurture skills training and employability. Their staff’s enthusiastic participation in fundraising campaigns and volunteering initiatives is a great encouragement to all of us at CPAS. Together, we can build an inclusive society with equal opportunities for all to reach their full potential.”

Ms. Cynthia Wong
Executive Director,
Cerebral Palsy Alliance Singapore (CPAS)



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Our People

As the power sector undergoes a challenging landscape, keeping our employees healthy and engaged continue to remain one of our key focus. To ensure that employees’ skillsets stay competitive to meet market challenges, the company continues to invest in the training and development of its employees through external courses and in-house training sessions. In addition, the company’s pro-family policies, as well as family and health-related activities organised by the Vibrancy Club actively encourages staff to lead a healthier lifestyle.



New employee hires and employee turnover

Employees that Stay & Strive

Staff turnover in FY2016/17 is the lowest compared to the past three years and consistently lower than the Petroleum Chemical & Pharmaceutical Industry which the company benchmarks against (see Table D below). The low staff turnover rate is an indication of the stability of its workforce and will put the Company in good stead to overcome tough market conditions and seize opportunities in upcoming Open Electricity Market.

The Company will continue its investment in learning & career development opportunities to aid in employees’ professional and personal progression, supplying the necessary platforms for them to achieve their career goals. At the same time, it will also ensure that their expertise and skills of operating and maintaining a power plant are seamlessly passed on to the next generation by progressively hiring new employees for renewal. In FY2016/17, 13 new hires were recruited with close to 77% below 30 years of age.

As part of pipeline and succession planning, the company has sponsored a total of eight students under various scholarship and work-study programmes including SGIS, EIS and Skillsfuture Earn & Learn. In FY2016/17, six students were also provided internship opportunities to be mentored under YTL PowerSeraya’s experienced staff.

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Staff Turnover Rate (Table D)

Staff Turnover Rate		FY2012/13	FY2013/14	FY2014/15	FY2015/16	FY2016/17
YTL PowerSeraya	Voluntary resignations, dismissal, medical board out, retirement & death in service	8.1%	17.1%	13.6%	13.5%	10.6%
	Voluntary resignations only	5.7%	10.1%	8.2%	9.7%	7.2%
Petroleum, Chemical & Pharmaceutical Industry*	Voluntary resignations only	12.0%	12.0%	14.4%	12.0%	15.6%

*Source: Singapore Yearbook of Manpower Statistics 2017, Ministry of Manpower

Employee Turnover by Age Group, Gender

Age Group	FY2016/17 Staff Turnover Numbers (by Gender, by Age Group)			FY2016/17 Staff Turnover Distribution (by Age Group)
	Male	Female	Total	
< 30 years	8 (6)	4 (11)	12 (17)	35.2% (38%)
30 - 50 years	7 (12)	4 (6)	11 (18)	32.4% (40%)
> 50 years	10 (7)	1 (3)	11 (10)	32.4% (22%)
Total	25 (25)	9 (20)	34 (45)	
FY2016/17 Staff Turnover Distribution (by Gender)	74% (56%)	26% (44%)		

Figures in brackets are for FY2015/16

New Employee Hires by Age Group, Gender

Age Group	FY2016/17 New Hire Numbers (by Gender, by Age Group)			FY2016/17 New Hires Distribution (by Age Group)
	Male	Female	Total	
< 30 years	6 (6)	4 (3)	10 (9)	76.9% (33%)
30 - 50 years	3 (7)	0 (9)	3 (16)	23.1% (59%)
> 50 years	0 (2)	0 (0)	0 (2)	0% (8%)
Total	9 (15)	4 (12)	13 (27)	
FY2016/17 New Hires Distribution (by Gender)	69.2% (56%)	30.8% (44%)		

Figures in brackets are for FY2015/16

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Pro-Family Working Environment

Close to 17% of non-shift employees are under the Company’s flexi-start arrangement, which enables them to balance their work and family commitments. Employees are also granted part-time arrangements, subject to the Company’s consent.

A lactation room at the corporate HQ and a gym at the power plant are some of the family-friendly and health facilities provided by the Company to help employees achieve greater work-life balance. These measures, coupled with the myriad of healthy and family-life activities organised by staff volunteers of the Vibrancy Club, help to keep our employees engaged.

Parental Leave

YTL PowerSeraya provides a supportive environment for working fathers to spend time with their newborn infants through a paternity leave scheme that entitles them to two weeks of paid paternity leave.

This scheme was implemented in late 2015 on a voluntary basis, a year before the implementation of government-paid paternity leave in 1 Jan 2017. Beside paternity leave, the company also provides maternity leave and shared parental leave.

Parental Leave (Table E)

Parental Leave Indicators (includes Maternity Leave, Paternity Leave and Shared Parental Leave)	Male		Female	
	FY2015/16	FY2016/17	FY2015/16	FY2016/17
a) No. of staff entitled to parental leave	3	4	3	3
b) No of staff who took parental leave	3	4	3	3
c) No. of staff who returned to work after parental leave	3	4	3	3
d) No of staff who returned to work after parental leave ended and were still employed 12 months after returning to work	2	4	3	3

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Inclusiveness

The Company promotes an atmosphere of inclusiveness in the workplace, embracing diversity amongst different races, genders, backgrounds and nationalities. The Company also ensures that employees are compensated based on their skills and experience, as well as their performance and the market value of the position they hold.

This is also in line with TAFEP’s (Tripartite Alliance of Fair & Progressive Employment Practices) principle of Fair Employment Practices and which is

also part of the collective agreement established with our union. To ensure a fair and inclusive working environment, a merit-based compensation system helps to track and minimise gender pay-gaps. As at FY16/17, the ratio of base salary (Male:Female) for the entire company stood at 1: 0.82. This compares well with Singapore’s Wage Equality Score of 0.81.

(Source : World Economic Forum’s Global Gender Gap Report 2016)

Ratio of Basic Salary [Male : Female] (Table F)

Positions	Ratio of Base Salary (FY2016/17)	
	Male	Female
Senior Management	1	0.79 (0.80)
Middle Management	1	0.79 (0.75)
Executives	1	0.81 (0.78)
Non-Executives	1	0.68 (0.67)
Overall	1	0.82 (0.80)

Figures in brackets are for FY2015/16

(note: Base Salary is the average salary of men and women excluding benefits, bonuses, allowances and any variable wage component)

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Employee Professional Development

With much focus on developing employees’ career paths, all employees are subjected to an annual performance appraisal process. This process provides employees with the opportunities to address their long-term career goals, identify competency gaps which can be bridged through training or coaching, with the end in mind to stretch their potentials to the fullest.

The continued emphasis on leveraging internal subject matter experts for on-the-job training and classroom knowledge sharing resulted in a dip in training expenditure per employee by more than 30% (vs. last financial year) and below Singapore’s National Average. At the same time, as such internal training hours were not fully captured in the training database, the average training hours recorded in the training database also registered a corresponding drop.



Training Expenditure (Table G)

Training Expenditure per Employee

	FY2012/13	FY2013/14	FY2014/15	FY2015/16	FY2016/17
YTL PowerSeraya	\$1350	\$1330	\$600	\$460	\$315
Singapore National Average*	\$407	\$407	\$410	\$410	\$410

*Singapore National Average is taken from the Ministry of Manpower (MOM) 2014 Report for Employer Supported Training that is published bi-annually.

Training Hours by Employee Category (include in-house training)

	Average Training Hours							
	FY2013/14		FY2014/15		FY2015/16		FY2016/17	
	Male	Female	Male	Female	Male	Female	Male	Female
Senior Management	41.6	8.0	23.3	16.0	24.7	31.3	24.2	21.0
Middle Management	46.5	44.6	27.7	14.6	32.0	17.4	28.0	21.0
Executives	39.2	17.8	30.4	12.9	37.4	22.3	27.0	19.3
Non-Executives	19.8	11.5	14.2	6.6	13.5	11.9	11.0	10.1
Overall	41.08	55.60	29.4	19.7	24.1	19.5	18.0	16.3

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Safety Awareness and Health Initiatives

YTL PowerSeraya’s continued emphasis on health is aligned with its aim of keeping its aging workforce active and healthy so they can lead meaningful and productive lives at and outside work. The Company conducts annual health screening exercises that will help identify health risks and improve employees’ well-being. In addition, a number of safety and health awareness initiatives were also conducted in FY2016/17, in line with the Company’s Safety and Health theme for the year: Work Safely, Work Responsibly, Stay Healthy.

This theme was also celebrated during Safety Day, an event that encourages employees to take responsibility for their health whilst also touching on the year’s safety performance and giving due recognition to the fire-fighting and first aid teams.

In the past three years, the Accident Frequency Rate (AFR) and Accident Severity Rates (ASR) were below the Singapore national average. In FY2016/17, despite 1 minor accident and 2 near-misses, the Company still managed to keep the AFR and ASR below the national average (Singapore All Industries) (Refer to Table H below on safety statistics). The minor accident in question involved a night-shift duty staff who injured his right toe from tripping over a pipe during a routine inspection of the power plant.

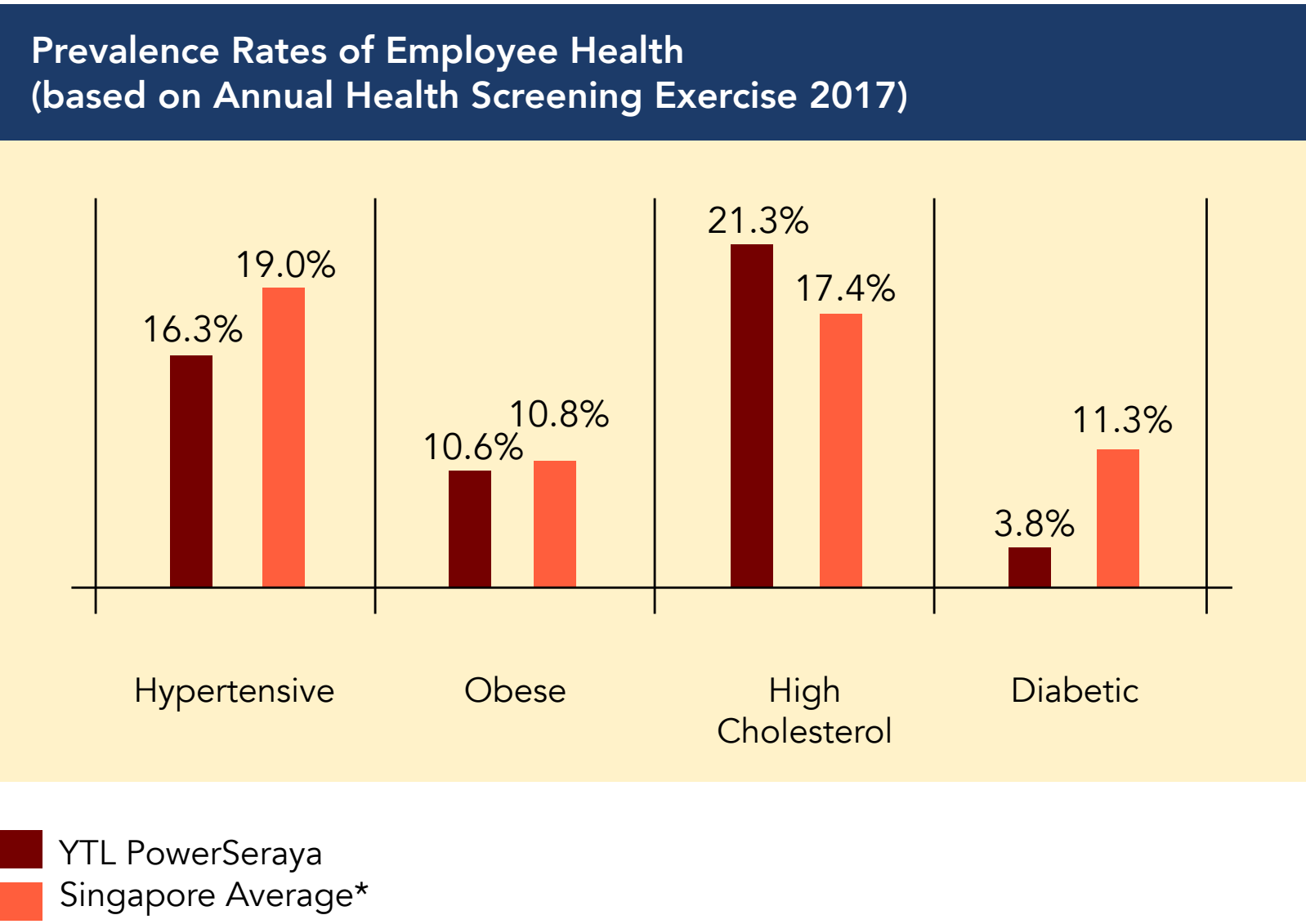
In the Company’s continuous efforts to prevent such accidents from recurring, awareness campaigns such as the Enhanced Confined Space Safety and the Safe Work-At-Heights training sessions were reinforced. At the same time, the Company sought to familiarise employees and contractors on regulations such as the enhanced permit-to-work requirements for work at confined spaces. The number of training hours spent on safety courses stood at 6.3 hours per employee. The Workplace Safety & Health (WSH) Committee, which meets on a monthly basis, comprises close to 25 members (8% of the workforce).

AFR = No. of accidents per million man-hours worked
ASR = No. of man-days lost per million man-hours worked



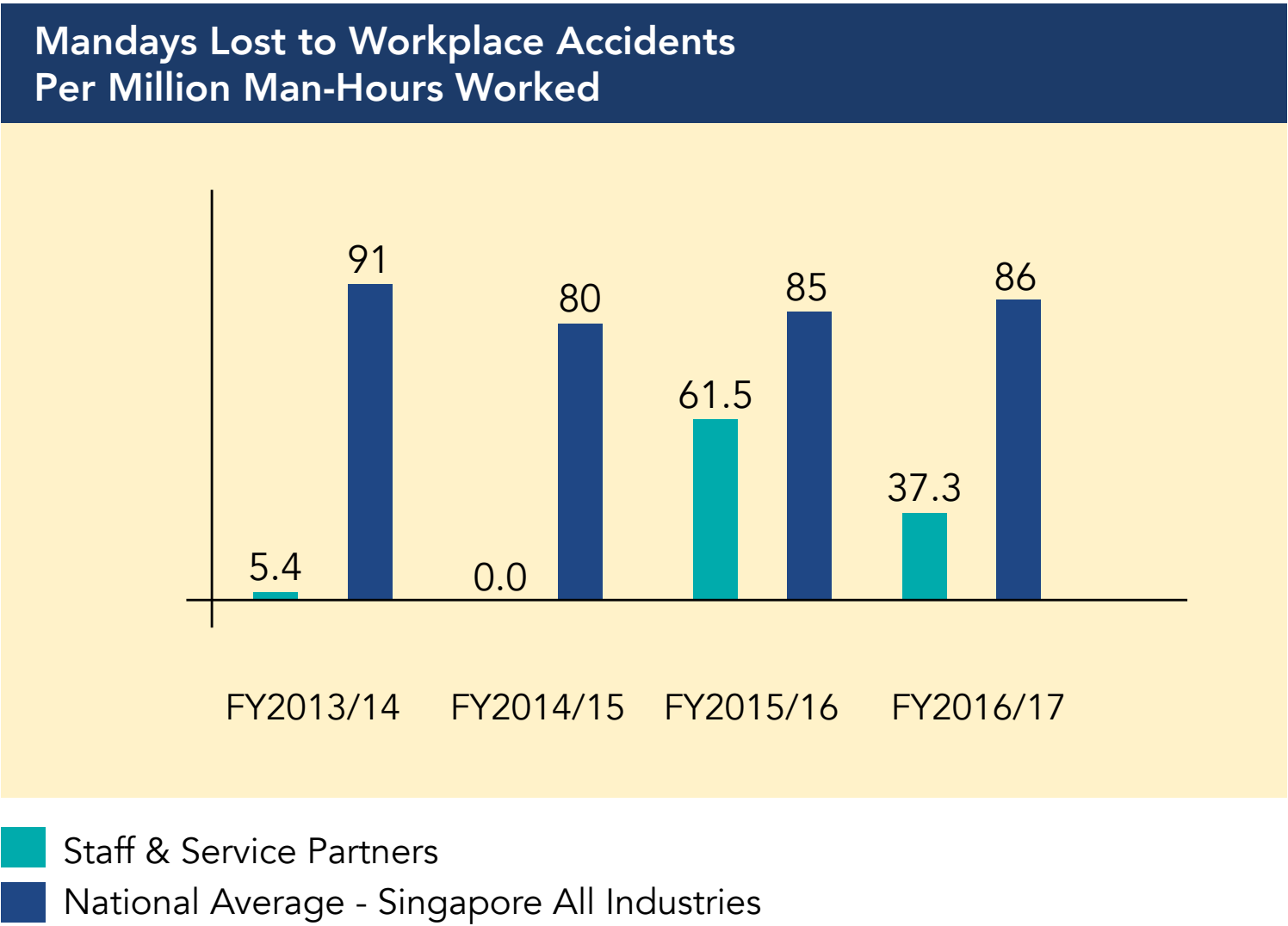
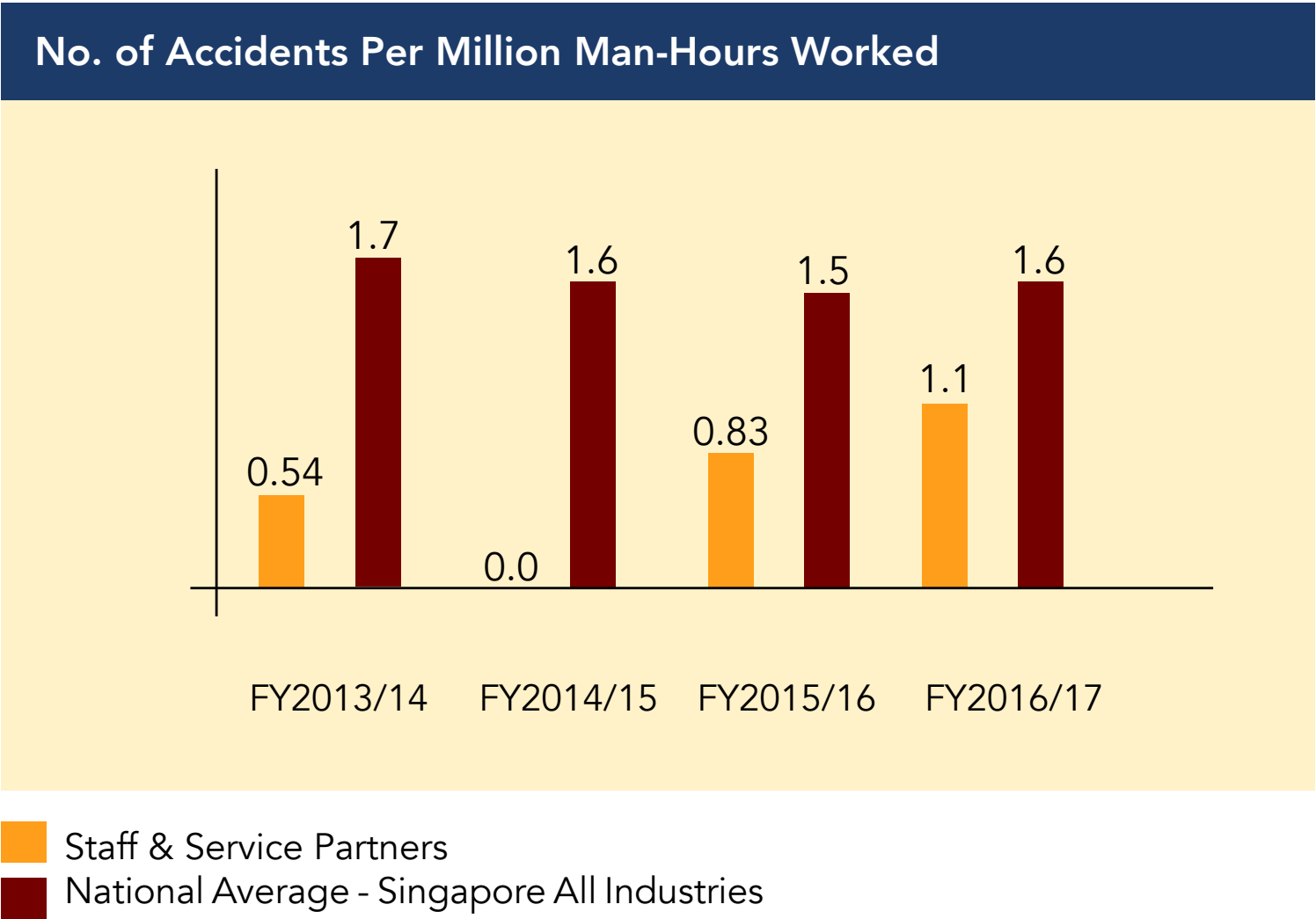
1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Employee Health Screening Result 2017



*Singapore Average Prevalence Rates are based on National Health Survey 2010.

Accident Statistics (Table H)



1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

GRI Standard	Disclosure	Page Number and/or URL	Omission	Alignment to Sustainability Development Goal (SDG)s
General Disclosures				
GRI 102: General Disclosures 2016				
102-1	Name of the organisation	Pg 5		
102-2	Activities, brands, products, and services	Pg 5		
102-3	Location of headquarters	Pg 5		
102-4	Location of operations	Pg 5		
102-5	Ownership and legal form	Pg 5		
102-6	Markets served	Pg 5		
102-7	Scale of the organisation	Pg 5		
102-8	Information on employees and other workers	Pg 5	Partial Omission. Information on temporary employees are omitted as their numbers are small relative to the total number of full-time employees.	
102-9	Supply chain	Pg 25, 26, 32		
102-10	Significant changes to the organisation and its supply chain	Not reported	Not applicable as there are no significant changes to the organisation and its supply chain.	
102-11	Precautionary Principle or approach	Pg 34 - 35		
102-12	External initiatives	Pg 5		
102-13	Membership of associations	Pg 5		
102-14	Statement from senior decision-maker	Pg 8 - 9		
102-16	Values, principles, standards, and norms of behavior	Pg 31		

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

GRI Standard	Disclosure	Page Number and/or URL	Omission	Alignment to Sustainability Development Goal (SDG)s
General Disclosures				
GRI 102: General Disclosures 2016				
102-17	Mechanisms for advice and concerns about ethics	Pg 31		
102-18	Governance structure	Pg 28		
102-19	Delegating authority	Pg 28 - 29		
102-20	Executive-level responsibility for economic, environmental, and social topics	Pg 28 – 29		
102-21	Consulting stakeholders on economic, environmental, and social topics	Pg 28 -29, 47 - 50		
102-22	Composition of the highest governance body and its committees	Pg 28 - 29		
102-23	Chair of the highest governance body	Pg 28		
102-24	Nominating and selecting the highest governance body	Pg 29		
102-25	Conflicts of interest	Pg 29, 32		
102-26	Role of highest governance body in setting purpose, values, and strategy	Pg 29		
102-27	Collective knowledge of highest governance body	Pg 29		
102-28	Evaluating the highest governance body's performance	Pg 28 - 29		
102-29	Identifying and managing economic, environmental, and social impacts	Pg 19, 28 - 29		
102-30	Effectiveness of risk management processes	Pg 33 - 35		
102-31	Collective knowledge of highest governance body	Pg 28 - 29		
102-32	Evaluating the highest governance body's performance	Pg 30		

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

GRI Standard	Disclosure	Page Number and/or URL	Omission	Alignment to Sustainability Development Goal (SDG)s
General Disclosures				
GRI 102: General Disclosures 2016				
102-33	Communicating critical concerns	Pg 29		
102-34	Nature and total number of critical concerns	Pg 29		
102-35	Remuneration policies	Pg 30		
102-36	Process for determining remuneration	Pg 30		
102-37	Stakeholders' involvement in remuneration	Pg 30		
102-40	List of stakeholder groups	Pg 20 – 22		
102-41	Collective bargaining agreements	Pg 49		
102-42	Identifying and selecting stakeholders	Pg 20 - 22		
102-43	Approach to stakeholder engagement	Pg 47 - 51		
102-44	Key topics and concerns raised	Pg 47 - 51		
102-45	Entities included in the consolidated financial statements	Pg 11		
102-46	Defining report content and topic Boundaries	Pg 3		
102-47	List of material topics	Pg 20 - 22		
102-48	Restatements of information	Pg 3		
102-49	Changes in reporting	Pg 3		
102-50	Reporting period	Pg 3		

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

GRI Standard	Disclosure	Page Number and/or URL	Omission	Alignment to Sustainability Development Goal (SDG)s
General Disclosures				
GRI 102: General Disclosures 2016				
102-51	Date of most recent report	Pg 3		
102-52	Reporting cycle	Pg 3		
102-53	Contact point for questions regarding the report	Pg 3		
102-54	Claims of reporting in accordance with the GRI Standards	Pg 3		
102-55	GRI content index	Pg 59 – 67		
102-56	External assurance	Pg 3		
Management Approach				
GRI 103: Management Approach 2016				
103-1	Explanation of the material topic and its boundary	Pg 20 – 22		SDG 8 Decent Work and Economic Growth SDG 12 Responsible Consumption and Production SDG 13 Climate Action SDG 17 Partnerships for The Goals
103-2	The management approach and its components	Pg 19, 23 – 26, 29, 33, 37 – 38, 52		
103-3	Evaluation of the management approach	Pg 28 - 29, 33, 36 – 37, 52-56		

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Sustainability Development Goal (SDG)s Icons:



GRI Standard	Disclosure	Page Number and/or URL	Omission	Alignment to Sustainability Development Goal (SDG)s
Economic				
GRI 200: Economic Topics				
202-2	Proportion of senior management hired from the local community	Pg 46		SDG 8 Decent Work and Economic Growth
203-1	Infrastructure investments and services supported	Pg 12, 32, 46		SDG 9 Industry, Innovation and Infrastructure
203-2	Significant indirect economic impacts	Pg 12		SDG 3 Good Health and Well-being SDG 8 Decent Work and Economic Growth SDG 10 Reduced Inequalities SDG 17 Partnerships for The Goals
204-1	Proportion of spending on local suppliers	Pg 32		SDG 8 Decent Work and Economic Growth SDG 17 Partnerships for The Goals
205-2	Communication and training about anti-corruption policies and procedures	Pg 33		SDG 8 Decent Work and Economic Growth
205-3	Confirmed incidents of corruption and actions taken	Pg 33		SDG 8 Decent Work and Economic Growth
Environment				
GRI 300: Environmental Topics				
301-1	Materials used by weight or volume	Pg 39		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
302-1	Energy consumption within the organisation	Pg 39		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
302-3	Energy intensity	Pg 39		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
302-4	Reduction of energy consumption	Pg 39		SDG 12 Responsible Consumption and Production SDG 13 Climate Action

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Sustainability Development Goal (SDG)s Icons:



GRI Standard	Disclosure	Page Number and/or URL	Omission	Alignment to Sustainability Development Goal (SDG)s
Environment				
GRI 300: Environmental Topics				
303-1	Water withdrawal by source	Pg 40		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
303-3	Water recycled and reused	Pg 40		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
305-1	Direct (Scope 1) GHG emissions	Pg 41		SDG 3 Good Health and Well-being SDG 12 Responsible Consumption and Production SDG 13 Climate Action
305-2	Energy indirect (Scope 2) GHG emissions	Pg 41		SDG 3 Good Health and Well-being SDG 12 Responsible Consumption and Production SDG 13 Climate Action
305-3	Other indirect (Scope 3) GHG emissions	Pg 41		SDG 3 Good Health and Well-being SDG 12 Responsible Consumption and Production SDG 13 Climate Action
305-4	GHG emissions intensity	Pg 41		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
305-5	Reduction of GHG emissions	Pg 41		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Pg 42		SDG 3 Good Health and Well-being SDG 13 Climate Action
306-1	Water discharge by quality and destination	Pg 42		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
306-2	Waste by type and disposal method	Pg 42		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
306-3	Significant spills	Pg 43		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
306-4	Transport of hazardous waste	Pg 43		SDG 12 Responsible Consumption and Production SDG 13 Climate Action
307-1	Non-compliance with environmental laws and regulations	Pg 43		SDG 12 Responsible Consumption and Production SDG 13 Climate Action

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Sustainability Development Goal (SDG)s Icons:



GRI Standard	Disclosure	Page Number and/or URL	Omission	Alignment to Sustainability Development Goal (SDG)s
Environment				
GRI 400: Social Topics				
401-1	New employee hires and employee turnover	Pg 52		SDG 8 Decent Work and Economic Growth
401-3	Parental leave	Pg 54		SDG 8 Decent Work and Economic Growth
402-1	Minimum notice periods regarding operational changes	Pg 49		SDG 8 Decent Work and Economic Growth
403-1	Workers representation in formal joint management-worker health and safety committees	Pg 57		SDG 3 Good Health and Well-being SDG 8 Decent Work and Economic Growth
403-4	Health and safety topics covered in formal agreements with trade unions	Pg 49		SDG 8 Decent Work and Economic Growth
404-1	Average hours of training per year per employee	Pg 56		SDG 8 Decent Work and Economic Growth
404-2	Programs for upgrading employee skills and transition assistance programmes	Pg 56		SDG 8 Decent Work and Economic Growth
404-3	Percentage of employees receiving regular performance and career development reviews	Pg 30		SDG 8 Decent Work and Economic Growth
405-2	Ratio of basic salary and remuneration of women to men	Pg 55		SDG 8 Decent Work and Economic Growth SDG 10 Reduced Inequalities
406-1	Incidents of discrimination and corrective actions taken	Pg 33		SDG 8 Decent Work and Economic Growth
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Pg 49		SDG 8 Decent Work and Economic Growth
408-1	Operations and suppliers at significant risk for incidents of child labor	Pg 33		SDG 8 Decent Work and Economic Growth
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Pg 33		SDG 8 Decent Work and Economic Growth

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Sustainability Development Goal (SDG)s Icons:



Electric Utility Sector

Description	Indicators	Page
Organisational Profile		
Installed Capacity	EU1	Pg 2
Net Energy Output	EU2	Pg 15
Number of Accounts	EU3	Pg 14
Economic		
Generation Efficiency	EU11	Pg 37 SDG 12 Responsible Consumption and Production SDG 13 Climate Action
Environmental		
Commentary – Total water withdrawal by source	EN8	Pg 40 SDG 12 Responsible Consumption and Production SDG 13 Climate Action
Commentary – Greenhouse gas emissions	EN16	Pg 37 SDG 12 Responsible Consumption and Production SDG 13 Climate Action
Commentary – Greenhouse gas reduction initiatives	EN18	Pg 37 SDG 12 Responsible Consumption and Production SDG 13 Climate Action
Commentary – Air Emissions	EN20	Pg 42 SDG 12 Responsible Consumption and Production SDG 13 Climate Action
Commentary – Water Discharge	EN21	Pg 42 SDG 12 Responsible Consumption and Production SDG 13 Climate Action
Commentary – Waste Type & Disposal Method	EN22	Pg 42 SDG 12 Responsible Consumption and Production SDG 13 Climate Action

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Sustainability Development Goal (SDG)s Icons:



Electric Utility Sector

Description	Indicators	Page	
Product Responsibility			
Programmes and Processes to ensure the availability of a skilled workforce	EN14	Pg 52 - 57	SDG 8 Decent Work and Economic Growth
Policies and requirements regarding health and safety of employees, contractors and subcontractor	EN16	Pg 57	SDG 3 Good Health and Well-being
Commentary – Staff Turnover	EU LA2	Pg 52	SDG 8 Decent Work and Economic Growth
Commentary – Percentage of employees covered by collective bargaining	EU LA4	Pg 6	SDG 8 Decent Work and Economic Growth
Commentary – Rates of injury, occupational diseases, lost days, absenteeism and total number of work related fatalities by region	EU LA7	Pg 57	SDG 3 Good Health and Well-being SDG 8 Decent Work and Economic Growth
Human Rights			
Commentary – Operations identified in which the right to exercise freedom of association or collective bargaining may be at significant risk, and actions taken to support these rights	EU HR5	Pg 49	SDG 8 Decent Work and Economic Growth SDG 10 Reduced Inequalities
Social			
Stakeholder participation in the decision making process related to energy planning and infrastructure development	EU19	Pg 47	SDG 8 Decent Work and Economic Growth SDG 9 Industry, Innovation and Infrastructure
Contingency planning measures, disaster/emergency management plans and training programmes, and recovery/restoration plans	EU21	Pg 24	

1	About This Report
2	Identity
3	Messages From The Top
4	Delivering Value
5	Sustainability
6	Governance
7	Environment
8	Social
9	GRI Content Index

Sustainability Development Goal (SDG)s Icons:

